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# Report of The SECRETARY of AGRICULTURE

# 1965

Department of Agriculture
Washington, D. C.

THE PRESIDENT
*The White House*
*Washington, D. C.*

Dear Mr. President:

It is my privilege to present to you this report on the services rendered by the Department of Agriculture to our farm and rural people and the entire Nation during the past year.

It was, as the report shows, a year of progress and promise—a year in which the Department of Agriculture continued to provide the leadership necessary to help farm and rural America advance toward its rightful place within the Great Society.

This report gives a brief account of our current activities in contributing to the rural renaissance, as well as in serving our family farmers, easing world hunger, and providing a multitude of aids to help the people of America benefit more fully from our national abundance.

On behalf of all the devoted public servants who work with me in the USDA, I take pleasure in submitting my annual report as Secretary of Agriculture for the year 1965.

Orville L. Freeman

ORVILLE L. FREEMAN
*Secretary of Agriculture*

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# YEAR OF PROGRESS—YEAR OF PROMISE

When agricultural historians review the decade of the 60's they will see 1965 as a major turning point: A year of progress for farm and rural America and American consumers—and a year of promise, too.

It was a year of progress for *producers.* Farm net income reached $14.1 billion—more than $1 billion over 1964 and $3.4 billion (21 percent) over 1960. Net income per farm averaged $4,182—a good 12 percent over 1964 and 42 percent higher than in 1960.

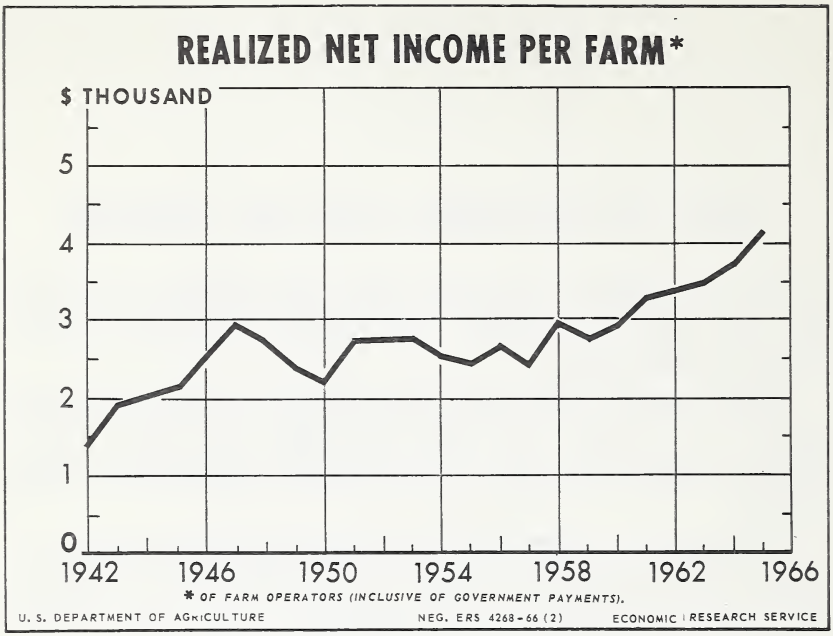
It was a year of progress for *taxpayers.* Carryover stocks of farm commodities fell to the lowest level since 1957, decreasing storage and handling costs. Grain surpluses continued to decline, but remained adequate to any emergency. And though cotton stocks were high, the tobacco carryover turned down.

It was a year of progress for farmers and others interested in agricultural *foreign trade.* Farm exports continued at or near record levels—$6.1 billion for the fiscal year and $6.2 billion for calendar 1965. Exports accounted for $1 out of every $6 farmers earned from the sale of their products. One-fourth of these exports were sent abroad under Food for Peace programs to meet food needs and foster economic development in over 100 countries around the world.

It was a year of progress in *farm legislation.* Congress enacted a sweeping, new long-term farm policy—the Food and Agriculture Act of 1965—giving us programs for the next 4 years. This act is a major turning point in farm policy. It strengthens and preserves in a modern context our free enterprise agricultural system.

It was a year of progress for all of *rural America.* More than 100,000 local rural leaders in over two-thirds of the Nation's counties cooperated in efforts to stimulate community growth. Department agencies continued to spur the revitalization of rural America through an accelerating outreach effort which is improving farms and homes, building community facilities, and stimulating industrial expansion.

Finally, it was a year of progress for *consumers.* The American people enjoyed an abundance of the highest quality and most varied food ever known to any nation. And they spent only 18.2 percent of their disposable income for it—less than ever before here or in any other nation. In addition, agricultural abundance was put to increasingly better use in serving children and the


REALIZED NET INCOME PER FARM*
$ THOUSAND
5
4
3
2
1
0
1942
1946
1950
1954
1958
1962
1966
* OF FARM OPERATORS (INCLUSIVE OF GOVERNMENT PAYMENTS).
U. S. DEPARTMENT OF AGRICULTURE
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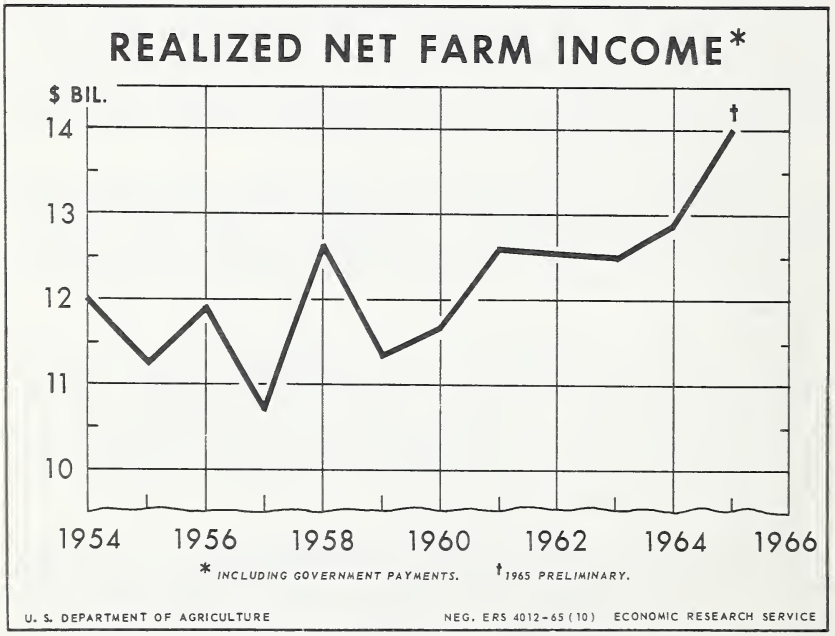
ECONOMIC RESEARCH SERVICE


REALIZED NET FARM INCOME*
$ BIL.
14
13
12
11
10
†
1954
1956
1958
1960
1962
1964
1966
* INCLUDING GOVERNMENT PAYMENTS.
† 1965 PRELIMINARY.
U. S. DEPARTMENT OF AGRICULTURE
NEG. ERS 4012-65 (10)
ECONOMIC RESEARCH SERVICE

needy. Over 40 million Americans (50 percent more than 5 years ago), many with low incomes, had a better diet due to expanded food distribution programs.

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In this present progress lies the seed of future promise—not only for 1966 but for the rest of this decade and beyond.

Farm *producers* can look to another rise of $1 billion in farm income in 1966—with additional increases after that. Income per farm in 1966 may reach $4,600. Equality of income opportunity for operators of efficient family-size farms is a realistic possibility before 1970.

*Taxpayers* can expect farm program costs to be further reduced. As the new legislation takes effect there will be substantial cuts in the surpluses of cotton and tobacco. Grain surpluses also will be reduced and maintained at adequate reserve levels.

*Farmers and others interested in exports* can anticipate a rise to $6.7 billion in U.S. agricultural shipments abroad in fiscal 1966. Compared with the 1965 level, exports may climb 25 percent by 1970 and 50 percent by 1975.

*People throughout rural America* can expect a continued and accelerated speedup in the creation of new jobs, new industries, new community facilities for better living, and new opportunities in rural communities countrywide.

*American consumers* can look for further reductions in the real cost of food. Whereas in 1965 our 195 million people spent 18.2 percent of their disposable income for food, by 1970 some 210 million Americans will be spending 17 percent or less for an even better diet. As a result, the average American family will have more to spend for things other than food.

In short, building on present progress and backed by the new farm legislation, the future promises a continued and better balanced abundance of food and fiber at minimum cost to taxpayers, at reasonable prices to consumers, and at fair returns to producers.

These are not just dreams or hoped-for goals. They are realistic objectives that can, and I believe will, be achieved.

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The following pages show how the agencies of the U.S. Department of Agriculture contributed to the great agricultural breakthroughs of 1965—year of progress, year of promise.

## STRENGTHENING OUR FAMILY FARMS

The production capacity of U.S. farms is one of the economic wonders of the 20th century. Farm productivity continues to grow with amazing speed. Crop yields and total crop output in 1965 rose 6 percent above 1964 and exceeded the previous all-time high of 1963 by 4 percent. With output of livestock and

livestock products equal to 1963 and fractionally below 1964, total farm output in 1965 rose 3.6 percent over the records established in the two preceding years.

Potential farm output, moreover, is considerably greater than actual output. With technical changes in American agriculture coming more rapidly than ever before, potential agricultural production during the past decade has increased three times as fast as 30 years ago.

Consequently, despite large acreage and commodity diversions each year, farm output since 1955 has still exceeded the annual growth in domestic demand resulting from an 18 percent increase in population, a 44 percent increase in per capita disposable income, and doubled farm exports.

More power, improved farm implements, the development and use of higher yielding crop varieties and of chemicals to control pests and weeds, and—most important—the increased use of fertilizers have kept productivity per acre and per hour soaring year by year.

The acreage and commodity diversions of the past 10 years, by conservative estimate, have reduced the volume of crop and livestock products that would otherwise have moved through commercial markets by a good 5 percent.

Without such programs, farm commodity prices almost surely would have fallen 20 percent or more below actual levels. Wheat prices probably would have dropped by one-half, cotton prices one-third, and feed grain and tobacco prices by more than one-fourth.

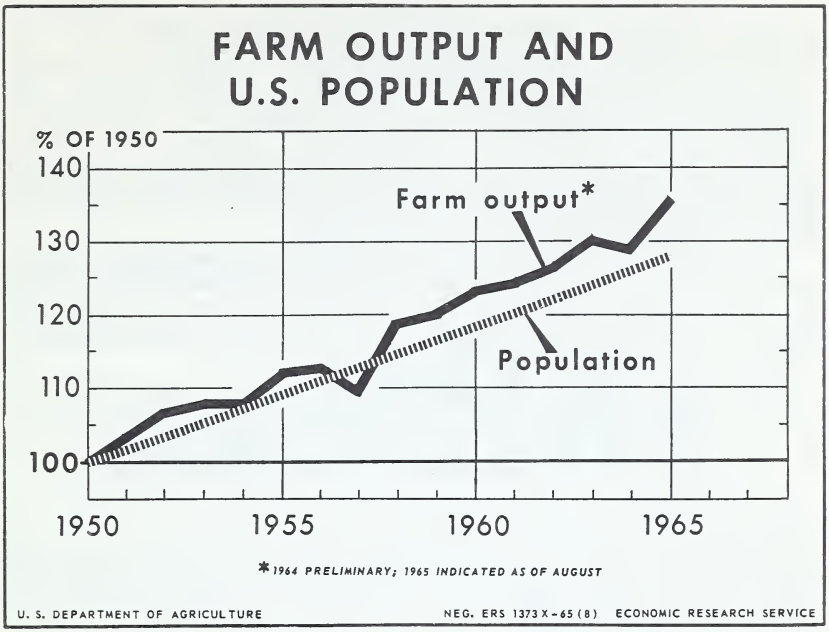
Net farm income would have dived even farther than prices. Net farm income, which averaged almost $13 billion a year over the past 5 years, would have been about $6 billion a year. And many farmers would have found themselves with no net income at all.

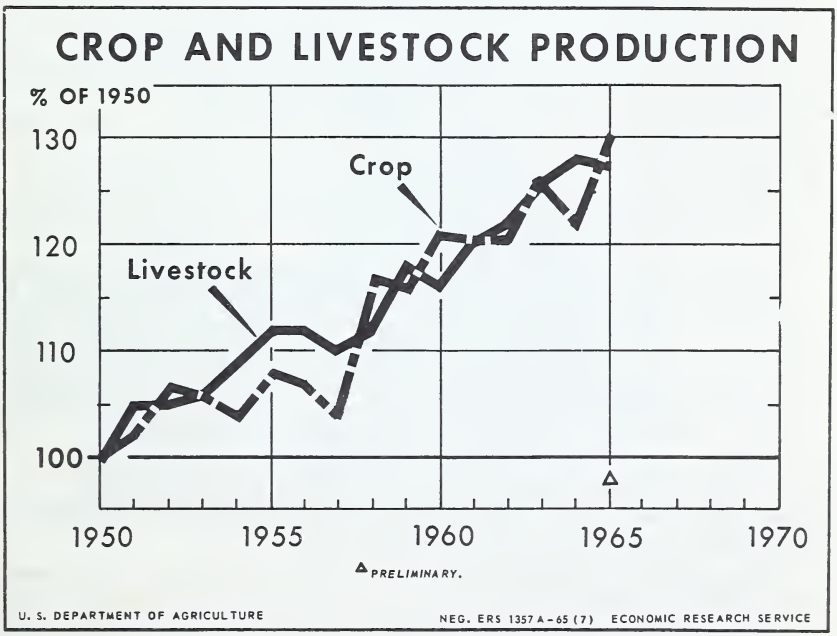
This is the measure of the worth of our price support and acreage diversion programs.

During the next 5 to 10 years, increased fertilizer use combined with other improved practices may raise corn yields almost one-third. In the Midwest States, with unlimited corn acreage, corn production could climb as much as 60 percent. Improved varieties and more fertilizer in the humid areas could boost wheat yields 5 to 10 bushels per acre, or 20 to 40 percent. Cotton yields may rise 50 to 100 pounds per acre, or 10 to 20 percent.

In view of these possibilities, the flexibility provided by the Food and Agriculture Act of 1965 is highly desirable. This act is something new in the Nation's agricultural policy.

It applies the principle that the individual farmer must have maximum flexibility to use his judgment and managerial skills, while at the same time government must have maximum latitude to provide incentives so production can be quickly adjusted to needs.


FARM OUTPUT AND
U.S. POPULATION
% OF 1950
140
130
120
110
100
Farm output*
Population
1950
1955
1960
1965
*1964 PRELIMINARY; 1965 INDICATED AS OF AUGUST
U. S. DEPARTMENT OF AGRICULTURE
NEG. ERS 1373 X-65 (8) ECONOMIC RESEARCH SERVICE


CROP AND LIVESTOCK PRODUCTION
% OF 1950
130
120
110
100
Crop
Livestock
1950
1955
1960
1965
1970
△PRELIMINARY.
U. S. DEPARTMENT OF AGRICULTURE
NEG. ERS 1357 A-65 (7) ECONOMIC RESEARCH SERVICE

It uses the market, both at home and abroad, to the maximum degree to establish prices and to allocate resources.

It extends the use of direct payments in combination with commodity loans to balance production with use and thereby keep farm income strong and reasonably stable.

It encourages new uses for land not now needed for crops—uses which can give more people, rural and urban, space in which to rest and play, hunt and fish, to know fresh air, and appreciate clean water and outdoor beauty.

The Food and Agriculture Act of 1965, in short, enables us to move in either of two directions for several major crops: Either toward diversion programs to avert sharp declines in farm income or toward larger output to meet domestic requirements or to ease world hunger.

If the need arose, for example, we could double our wheat production in 2 years.

## WHAT THE COMMODITY PROGRAMS ACHIEVED

### Feed Grain Surplus Continues to Drop

On October 1, 1965, we reached the end of the fourth marketing year for feed grains since we began the acreage-diversion type of program in 1961.

During those 4 years:

Producers' returns from feed grains averaged more than $1 billion per year higher than the returns for 1960–61.

The national carryover of feed grains was reduced about 1 billion bushels—or 35 percent.

Costs of feed grains for livestock growers were kept relatively stable, and supplies remained more than adequate at all times.

Government costs were reduced by about $100 million per year compared with 1960.

Exports of feed grains in the 1964–65 marketing year climbed to a record 21.9 million tons—70 percent more than in 1960–61 when exports totaled 12.7 million tons. The 1964–65 exports, worth about $1 billion, were mostly for cash.

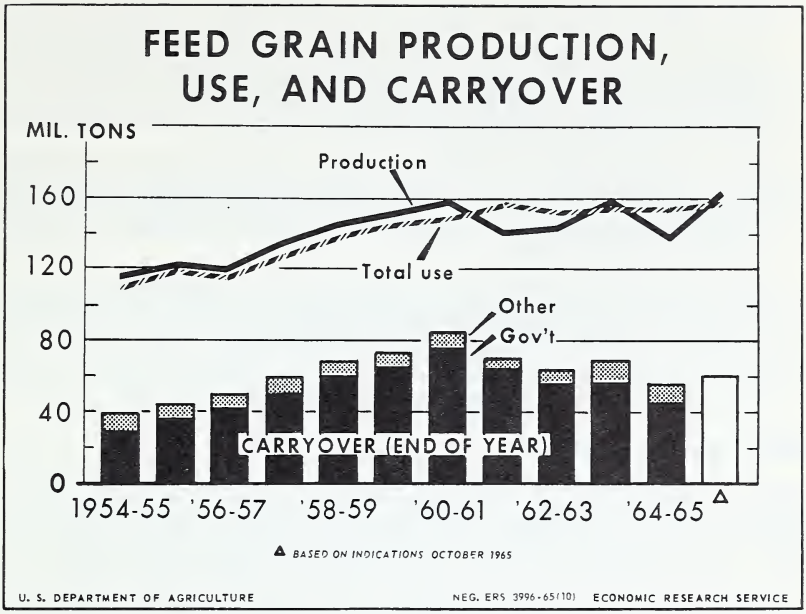
About 34 million acres of feed grain cropland were diverted to conserving uses in 1965. But for this heavy diversion, 1965 could have been a surplus production year of phenomenal proportions. Exceptionally high record yields per acre—corn up 16 percent over a year earlier and sorghum up 17 percent—could have boosted production a billion bushels or more, wiping out all the progress of the preceding 4 years. Actually, the carryover at the close of the 1965–66 marketing year will change little, if any, from the previous year.

### Successful First Year of Wheat Certificate Program

The first year's use of the wheat certificate program (1964–65 marketing year) also proved most successful.

Farm income from wheat was about $450 million higher than would otherwise have been possible.

The wheat carryover on July 1, 1965, stood at 819 million bushels—592 million bushels, or 42 percent, below the all-time record of 1,411 million bushels four years earlier.


FEED GRAIN PRODUCTION, USE, AND CARRYOVER
MIL. TONS
Production
160
120
Total use
Other
Gov't
80
40
CARRYOVER (END OF YEAR)
0
1954-55
'56-57
'58-59
'60-61
'62-63
'64-65
△ BASED ON INDICATIONS OCTOBER 1965
U. S. DEPARTMENT OF AGRICULTURE
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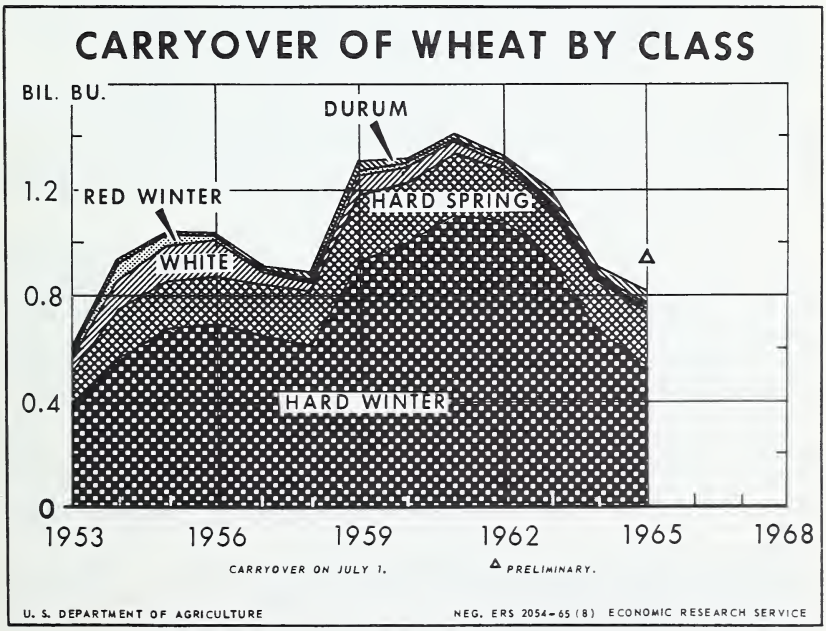
CARRYOVER OF WHEAT BY CLASS
BIL. BU.
DURUM
1.2
RED WINTER
HARD SPRING
WHITE
0.8
0.4
HARD WINTER
0
1953
1956
1959
1962
1965
1968
CARRYOVER ON JULY 1.
△ PRELIMINARY.
U. S. DEPARTMENT OF AGRICULTURE
NEG. ERS 2054-65 (8) ECONOMIC RESEARCH SERVICE

Price support costs were reduced about $200 million. The only payment to farmers made directly by this government was for acreage diversion, a little over $30 million. Certificate costs were paid by processors and exporters. Since less acreage was planted to wheat, and utilization exceeded 1964 crop production, considerably less grain went into CCC stocks under price support loans than in previous years. Substantial costs for storage and handling were avoided.

Wheat exports totaled 728 million bushels in 1964–65, with dollar sales accounting for 162 million bushels. Most of the balance moved into export under Title I of P.L. 480, with India and Pakistan the largest recipients. The certificate plan made it possible to sell wheat for export without excessive subsidy.

For the first time in many years wheat prices became somewhat competitive with feed grains. For the marketing year ended June 30, 1965, we estimate that 70 million bushels of wheat were used for feed. This was about twice the amount fed in most earlier years.

And consumer prices of bread were virtually unchanged from the period before the certificate program went into effect.

### New Program for Cotton

For the first time in the long history of U.S. farm legislation we now have a complete, coordinated cotton program. Historically, cotton programs have been patched together from bits and pieces of legislation passed by the Congress from year to year.

Under the new program enacted as part of the Food and Agriculture Act of 1965, U.S. cotton can now be sold on world markets at world prices. Hitherto, our cotton was priced too high to sell in these markets until the rest of the cotton growing world had sold off its saleable supplies, thus making U.S. a residual supplier. Competing on a price basis with other cotton, we hope to regain our traditional share of the world cotton trade.

The up-to-date pricing mechanism of the new program can also help cotton regain at least part of the domestic market which it has lost to synthetic fibers. The old rigid pricing policy of previous cotton programs permitted manufacturers to price synthetic fibers just low enough to capture much of the market. Now cotton growers can compete more effectively.

For the 1966 cotton growing season, cotton price support loans will be based on a national average rate of 21 cents a pound, compared with 29 cents in 1965. However, growers who voluntarily cooperate in the effort to bring production into line with domestic and foreign demand will receive direct payments to boost their net income.

Thus, cotton growers receive a domestic cotton allotment set at 65 percent of their effective total cotton acreage allotment. By planting within this domestic allotment, growers become eligible for a direct price support payment per pound of cotton of 9.42 cents.

Those who divert up to 35 percent of their effective allotments from cotton into conserving uses become eligible for an additional diversion payment of 10.5 cents a pound on what that acreage would have been expected to produce, under normal conditions.

Small producers of cotton are eligible for the payments without reducing their cotton acreage.

The combination of the new price support loan rate with these two types of payments makes it possible for cotton farmers to take part in the program without sacrificing their net farm income.

The program provides new tools. Growers will have to learn to use them effectively. When they do, producers will be on the road once again toward a healthy and prosperous cotton industry.

### Dairy Products

High consumer income maintained a strong demand for fluid milk, ice cream, and cheese in 1965. Coupled with a reduction in milk output, this greatly reduced CCC price support purchases of butter, cheese, and nonfat dry milk.

Two years before, at peak periods of 1963, CCC held in storage 437 million pounds of butter, 60 million pounds of cheese, and 525 million pounds of nonfat dry milk.

In contrast, on December 31, 1965, CCC's uncommitted stocks were reduced to 65 million pounds of nonfat dry milk, 2 million pounds of butter, and no cheese.

### Tobacco Acreage-Poundage

The acreage-poundage program for flue-cured tobacco, adopted by producers in a referendum in May, brought considerably less tobacco to the auction floors, but more money to farmers. Much less tobacco went under government loan.

Through October 7, 1965, farmers sold 887,229,000 pounds of tobacco, 43,464,000 pounds less than at this time in the 1964 marketing season. Receipts totaled $572,483,000, an increase of $35,380,000 over a year earlier.

Of the flue-cured tobacco auctioned, only 6.1 percent was placed under price support, compared with 17.7 percent the preceding year.

### Quality of Peanuts for Food Use Kept High

We are winning the war on mold-produced aflatoxin.

Relying on experience gained under the 1964 quality control program, producers, handlers, and processors, aided by USDA, provided added assurance of a top quality food for consumers.

Handlers buy from farmers for edible use only those peanut stocks containing less than 2 percent damaged kernels. Handlers then remove damaged and other kernels most likely to contain aflatoxin and divert them from the edible trade.

All lower quality kernels are sold for crushing only, with appropriate tests and controls for aflatoxin.

The quality control program is administered by an 18-member Peanut Administrative Committee composed of three producers and three handlers from each of the three producing areas—Southwest, Southeast, and Virginia-Carolina. Committee actions are subject to approval by the Secretary.

### CCC Price Support Investment Continues to Drop

Commodity Credit Corporation's investment in price support loans and inventories on December 31, 1965, totaled $6.7 billion, down $700 million from 1964, almost $1.2 billion from 1960 and $1.4 billion below the peak year-end inventory of December 31, 1959.

About $1.9 billion was invested in the five feed grains, more than $500 million less than on June 30, 1964, and $1.4 billion below 1961. The $1.4 billion wheat investment was $400 million less than in 1964, $1.3 billion below 1961.

The cotton investment, however, rose from $2.0 billion in 1964 to $2.2 billion, and totaled about $1.7 billion more than in fiscal year 1961. The tobacco investment of $829 million was $21 million below December 1964 and $487 million higher than in 1961.

These commodities accounted for 94 percent of CCC's investment with the remainder spread among dairy products, rosin, flaxseed, soybeans, tung oil, rice, linseed oil, peanuts, honey, vegetable oil products, and dry edible beans.

## OTHER PROGRAMS AND SERVICES TO IMPROVE FARM INCOME

The Department also administers other programs and services which strengthen farm income either by building farmers' "economic muscle" in the marketplace or by making agricultural marketing more orderly and efficient.

### Marketing Agreements and Orders

These are voluntary programs, initiated by farmers or their cooperative associations, which enable farmers to organize for marketing, increase their bargaining strength, and fit supply to demand. They are based on public hearings and administered by the USDA to assure protection of the public interest.

Two-thirds of all the milk used for fluid purposes—more than 6 billion gallons, valued at over $2.4 billion at minimum order prices—was marketed under Federal milk marketing orders in calendar year 1965. Some 158,000 dairy farmers supplied milk to 73 Federally regulated markets serving more than 111 million consumers.

Forty-three marketing agreements and orders covering fruits, vegetables, and nuts, valued at about $1.5 billion, were in use in 23 States.

### Eating the Surpluses

To help stabilize farm prices—and at the same time make our food abundance more widely available—we purchase foods in temporary surplus and distribute them to schools and needy persons. Our purchases in fiscal year 1965 exceeded 570 million pounds and cost $226.7 million. Major items and their costs included nearly 280 million pounds of beef—$156.7 million; 85 million pounds of lard—$13.9 million; 43.8 million pounds of peanut

butter—$12.6 million; 32.8 million pounds of margarine—$5.1 million; and 4.8 million pounds of dried eggs—$5.2 million.

### Matching Funds

Many marketing problems occur at State and local levels. These are attacked through projects proposed and carried out by State departments of agriculture, but approved and partially financed by USDA. Last year our Consumer and Marketing Service contributed $1.5 million to help 44 States plan and carry out 145 projects.

Two States received USDA's Superior Service Group Awards for their work on Matching Fund programs. New York won the award for its Long Island Duck market development program which helped increase farmers' returns at a time of record high inventories and low prices. The Virginia Department of Agriculture received the award for helping farmers market feeder pigs more profitably.

### Market News

Market news helps farmers and shippers decide where and when to market to best advantage, thus helping to keep products flowing steadily to the right markets at the right time.

Our Federal-State Market News Service celebrated its 50th Anniversary during 1965. From the first small-scale market news report issued on Louisiana strawberries back in 1915 we have developed a nationwide system of Federal and State reporters who gather vital price and supply information on all major agricultural commodities and flash it to farmers, marketers, wholesale sellers and buyers, processors, and others.

We began in 1965 a new report on weekly prices of apples for processing (40 percent of the crop now moves to processors), which helps apple growers make important marketing decisions. We also expanded our cotton market news to include quotations for Micronaire readings in addition to grade and staple length for the 15 markets in our daily "Spot Cotton Quotations" report.

Market news has its "off-beat" achievements, too. A call went out from a New Orleans hospital for watermelons, a deathbed request of an old man suffering from nephritis. Watermelons, out of season, can be pretty much like needles in haystacks. But our market news system helped locate two melons in New York and saw them rushed by air to New Orleans.

### Regulatory Programs

To protect the interests of farmers, marketers, and consumers, we administer more regulatory laws than any other government agency.

These "rules of the road" are basic to the free enterprise, food marketing system.

The *Packers and Stockyards Act,* for example, helps preserve free and open competition and fair business practices in marketing livestock, meat, and poultry.

In administering this law during fiscal year 1965 we informally settled more than 3,600 complaints, resulting in payments of $2.1 million to claimants. We issued orders awarding reparations totaling about $286,000. We received, altogether, over 4,800 complaints—almost 39 percent more than the previous year—and we handled this increased volume with less than 2 percent more personnel and 1 percent more operating funds.

Continuing our efforts to improve the administration of this law, we signed memorandums of understanding with six States. These agreements strengthen the protection afforded by State and Federal agencies and reduce duplication of effort.

We handled more than 2,300 cases under the *Perishable Agricultural Commodities Act*, which requires fair practices in marketing fresh and frozen fruits and vegetables. This resulted in reparation payments to claimants of more than $3 million.

In enforcing the *Federal Seed Act*—a truth in labeling law on which farmers rely when buying seed—we made about 27,000 separate tests on 10,700 seed samples. To help enforce this Act, the Department has memorandums of understanding with all 50 states.

We improved the efficiency of our *warehouse examination* function by consolidating two separate activities. The Warehouse Service Branch of the Consumer and Marketing Service now administers both the U.S. Warehouse Act, under which approved warehouses may be Federally licensed, and the examination of other warehouses which store commodities owned by the Commodity Credit Corporation.

To help farmers achieve fair and reasonable transport services and rates, we presented evidence in 102 separate actions before rate bureaus and regulatory bodies such as the Interstate Commerce Commission. Reduced rates obtained through these efforts encouraged wider domestic and export movements of grain.

### Commodity Exchange Authority

Our Commodity Exchange Authority safeguards both producer and consumer interests by maintaining free and competitive pricing in commodity futures markets in Chicago, New York, and other exchange centers. Trading regulation has kept pace with a great expansion in use of the leading commodity markets over the past five years.

In calendar year 1965 total trading in CEA-regulated commodities reached an alltime record of nearly 14 million transactions. This was 21 percent more than in 1964, and nearly twice as large as in 1960. The estimated value of trading rose to $71.3 billion in 1965, compared with $54.3 billion one year earlier, and $22.7 billion five years earlier.

To prevent price manipulation, exceeding speculative limits, wash trading, cheating and defrauding commodity customers, and other violations, we exercised daily surveillance over roughly 1,000 large traders (daily average).

## STRENGTHENING FARMER COOPERATIVES

Much of our farmers' economic strength is provided by cooperatives. According to the latest figures available (based on 1962–63) about 8,900 marketing, purchasing, and related service cooperatives do a net annual business of at least $13.8 billion. These associations annually provide farmers added returns of about half a billion dollars in patronage refunds.

Our Farmer Cooperative Service is currently making basic studies to learn the methods fruit and vegetable growers, dairymen, and others have found most effective in bargaining for better marketing returns.

> FCS research on cotton ginning and handling has pinpointed changes cooperatives can make which raise growers' returns up to $5 a bale.
>
> Another study shows cooperatives how to make substantial savings in mixing and distributing liquid pesticides.
>
> FCS has co-sponsored 11 annual conferences of cotton and soybean oil producers which have stimulated operating improvements in these grower-owned businesses.

As part of its educational program, FCS provides publications helpful to cooperatives. The agency's annual statistical report on cooperatives is the only available source of such basic information.

Other publications provide insights into the methods of financing and forms of capital structure needed today, evaluations of new services and programs of supply cooperatives, and ways to strengthen bargaining and purchasing power through coordinated sales agencies, merger and consolidation, and integrated operations.

## CONSERVING AND IMPROVING NATURAL RESOURCES

The U.S. Department of Agriculture is the principal Federal guardian of most of the Nation's renewable natural resources.

Among the most important of these resources are the 154 National Forests and 19 National Grasslands. Located in 41 States and Puerto Rico, and comprising 186 million acres, they are administered by the Department.

Seventy percent of the area of the 48 States making up the U.S. mainland and 59 percent of the land and water areas of the 50 States are privately owned. But here, too, we have important responsibilties. On these properties, the Department helps millions of individual owners and operators carry out programs of soil, water, and timber conservation.

Although conservation is becoming more and more consumer and community oriented, many USDA conservation programs are still primarily aimed at strengthening and improving family farms and the family farm pattern of agriculture. These programs help farmers use their land in ways that increase income, while simultaneously assuring a lasting base of soil, timber, and water resources for future national needs.

Ninety-five percent of all the U.S. land in farms and 98 percent of the individual farms and ranches in the United States are now in organized soil and water conservation districts which cooperate closely with the Department. Twenty-six States, Puerto Rico, and the Virgin Island are completely covered by districts. More than 2 million private landowners controlling 675 million acres cooperate with the districts in planned conservation programs.

### Some 1965 Conservation Accomplishments

Our Soil Conservation Service helped landowners prepare 97,621 conservation plans in calendar year 1965. Over one-third of the Nation's farms now have detailed conservation plans.

We provided onsite services to 1,141,000 cooperators.

In the Great Plains Conservation Program, landowners signed 3,431 new contracts covering 4,825,850 acres. Of 948,084 acres of cropland on these farms and ranches, 166,385 will be converted to other uses, mainly grass.

New soil surveys were completed on almost 56 million acres.

### Agricultural Conservation Program

In addition, about 1.1 million farmers, ranchers, and woodland owners participated in the Agricultural Conservation Program during 1965, applying needed soil, water, woodland, and wildlife conservation measures on their privately owned lands with cost-sharing help from the government.

While costs of these conservation practices are shared about fifty-fifty on the average, adjustments may be made to reflect land needs, the speed of action required, or the economic resources of farm families. Such adjustments are made locally by elected farmer committees of the Agricultural Stabilization and Conservation Service which administer the ACP at the county level.

Enduring vegetative cover, such as grass or trees, and water conservation and management practices are encouraged. These practices protect and improve farmland natural resources, help shift land to more needed uses, and insure a cleaner and more dependable supply of water for urban and industrial use.

### Land Conversion

Land-use adjustments in accordance with conservation plans continued to move large acreages out of cropland during 1965.

We estimate that about 2.3 million acres of cropland were converted to other uses: Specifically, 2 million acres to grassland, 123,000 acres to woodland, 74,000 acres to wildlife and recreation, and 94,000 acres to "other" uses. This was offset in part by the conversion of about 300,000 acres from other uses to cropland, resulting in a net reduction in cropland of about 2 million acres.

The Cropland Conversion Program, initiated on a pilot basis in 1963, provides us with a broad cross section of experience

with the problems encountered in converting land from row crops and small grains to woodlands, grass, recreation, and other long-range conservation and income producing uses.

In 1965 we carried on test projects in 100 counties of 36 States. New agreements of 5 to 10 years beginning in 1966 are authorized in 67 counties of 21 States. These will give us additional experience with different types of farms, land, crops, varying income and costs of land-use adjustments.

Farmers may receive adjustment payments, cost-sharing payments, and technical assistance for participating. These aids help farmers finance conversion to a different type of farming, but do not provide them with an income substitute. The program is important because it recognizes that future farm income in many instances will come primarily from "substitute" systems of farming.

The Food and Agriculture Act of 1965 authorized a new program aimed at long-term land use changes. The *Cropland Adjustment Program*, being inaugurated in 1966, will remove land from production of allotment or base acreage crops and put it into public benefit uses under 5 to 10 year agreements.

Farmers who participate will receive adjustment payments related to the value of the crops normally produced on the land, with emphasis on specific, designated crops. In appropriate areas some farms will be offered an additional per-acre payment to permit free public access for fishing, hunting, hiking, and trapping.

Wildlife plantings and grass and tree cover assistance will be authorized for increasing outdoor recreation opportunities, preserving open space, improving natural beauty, and preventing air and water pollution.

We can also share with State and local government agencies the cost of establishing approved practices on cropland acquired for nonfarm uses.

### Conserving and Improving Our Forests

Forests offer much more than timber to the economy. The National Forests, for example, provide forage for farm and ranch livestock, food and shelter for wildlife, and much of the water supply which agriculture must have to exist.

Besides managing the 186 million acre National Forest System, our Forest Service gives cooperative aid, research, and broad leadership for the management of 367 million acres of privately owned forests in the country and 28 million acres of State and other public (non-Federal) forests. Our forestry research undergirds all efforts to improve and practice better forestry nationwide.

*Helping Woodland Owners.* During the 1965 fiscal year, under our regular cooperative programs with the States, we gave technical help to 99,000 woodland owners, assisting them in managing about 6,200,000 acres of privately owned small forests from which they sold $17.4 million worth of timber.

*Forest Cooperatives.* Early in the year we set up a committee, with our Forest Service representative as chairman, to encourage and aid forestry-based cooperatives. By the end of June, 20 State Technical Action Panels had appointed advisory groups to help local communities make studies and form cooperatives. We expect several forestry cooperatives to be in operation within another year. They will enable groups of local forest landowners to band together, for management and marketing purposes, and accomplish what they cannot do as individuals.

## FEDERAL CROP INSURANCE

This protective service enables farmers to put a floor under their losses from flood, drought, freeze, and other natural disasters—by insuring their production expenses.

High production costs and big capital investments have made the impact of crop failure greater today than ever before. Without insurance, one crop failure can cripple a farm family's economic future or perhaps force it out of farming altogether.

Insurance is now available on 23 crops, as against 14 in 1961. It is now offered in about 50 percent more counties than in 1961 and the protection provided, about $590 million, has more than doubled. With wheat, corn, and citrus in several areas suffering heavily from drought, excessive moisture, and freeze, insured farmers in 1965 received about $40 million in indemnity payments. Farmers paid over $36 million in premiums. It was only the second year of the last nine that indemnities exceeded premium income.

Crop insurance is a boon both to farmers and to business people serving farm communities.

> A Nebraska banker, writing about the improvements he had observed in his rural town since he moved there 22 years before, said:
>
> "The economic stability of the Chappell trade area has been improved substantially as a result of the diligent efforts of the local Federal Crop Insurance Corporation Agency. Over 80 percent of the Chappell area farmers, both large and small, have their presently growing wheat crop insured with this All Risk Federal Crop Insurance. In the event our community had a total crop disaster this year, our wheat farmers would be indemnified by the Federal Crop Insurance Corporation in an amount in excess of $1,500,000. The collateral feature of the Federal Crop Insurance contract provides excellent collateral to be used by the local bank where needed to make seasonal loans available to farmers."
>
> His community did have a disaster—a severe drought—and indemnities of about $2 million were paid to wheat growers in his and adjoining counties in 1965.

The Nation's wheat and cotton farmers now have an opportunity to plant with more income assurance than ever before. By adding Federal Crop Insurance protection to the value of their certificates, they can be sure of income above their costs even though their crops are destroyed. The certificates combined with FCI protection bring them a new level of income stability.

Hail and rain ruined this cornfield.

A town flooded by the Mississippi River.

## OTHER DISASTER PROGRAMS

Floods in the Pacific Northwest, tornadoes and floods in many areas of the Midwest, drought in the Northeast, one of the most severe winters on record in the Great Plains, and in the South "Betsy," considered by many the worst hurricane of the century —these were among the natural disasters of 1965.

When "Betsy" hit Florida, Mississippi, and Louisiana in the late summer of 1965, all the Department's disaster programs swung into action. The hungry and homeless were cared for. Over 4 million pounds of food were shipped in by rail, truck, and plane to help 250,000 disaster victims. Damage to crops and livestock was speedily assessed. Special rural housing loans were made available in small towns. Thousands of copies of the useful USDA publication "First Aid for Flooded Farms and Homes" were widely distributed. Aided by 500 REA co-op linemen from 7 neighboring States, 12 rural electric co-ops in Florida, Mississippi, and Louisiana restored service to most of their 66,000 rural consumers within 48 hours after the hurricane struck.

Some USDA employees took on new and unfamiliar tasks. Sam Curcio, an employee in USDA's ASCS State office in Alexandria, La., became a hay expert in a hurry. At 11 a.m. one morning in the midst of all the havoc created by "Betsy," Curcio received a message that hay was urgently needed for cattle stranded near New Orleans. Normally Curcio doesn't deal with a bale of hay from one year to the next. But with the help of radio stations to describe the problem, farmers to provide the hay, and truckers to haul it, Curcio started a haylift. By 4:30 p.m. on the same day the first truckload of hay was enroute to the flooded area.

Altogether 500 tons of hay were bought and delivered to relieve stranded and commingled cattle in Orleans, St. Bernard, and Plaquemines parishes. In addition, 1,850 bushels of corn out of CCC stocks located in New Orleans were made available, after the tasks of grinding and bagging were completed.

The livestock feeding program is one of three special emergency programs carried out by our Agricultural Stabilization and Conservation Service. Others are the emergency conservation measures offered under the 1965 Agricultural Conservation Program, and the grazing of livestock and harvesting of hay on diverted or retired croplands. One or more of these programs was put to use in about 860 counties or parishes in 43 States during 1965.

An extremely severe winter following continued drought and a shortage of feed and forage crops in many areas made necessary a very large emergency livestock feeding program during 1964–65. We sold a record total of 63½ million bushels of CCC-owned feed grain in 727 counties of 34 States. The program for 1965–66 built up more slowly. By mid-fall of 1965 it was operating in 157 counties of 14 States, almost all in the dry East and Northeast.

Under the emergency conservation program we allocated a record $22.5 million to 531 counties of 35 States and Puerto Rico to share with farmers the cost of repairing farm and land damage caused by drought, floods, tornadoes, and hurricanes. This nearly doubled the previous record allocations of 1961.

We allocated over $6 million to repair damage done by the record flooding of the Mississippi and its tributary rivers.

We made cost-sharing allocations of $2,500,000 to restore farmlands and farm facilities in 44 counties of Indiana, Michigan, and Ohio, struck by devastating tornadoes on Palm Sunday.

Use of retired or diverted cropland for haying and grazing purposes under emergency conditions reached a peak in the fall of 1964 and tapered off seasonally a few weeks later.

Late in September 1965 this program was operating in 294 counties of 18 States compared with 1,230 counties in 34 States a year earlier. Altogether, fewer than 900 counties in 30 States used the program in 1965.

This reflects changes in the drought pattern over the Nation. While use of the program increased in the Northeast States, it dropped off sharply in the Midwest and West where pasture and range conditions improved after heavy rains and deep snows during the winter of 1964–65.

### Emergency Loans

In the aftermath of every major disaster, credit is a foremost emergency and rehabilitation tool.

About 22,000 rural families received emergency loan assistance totaling $78 million from our Farmers Home Administration in 1965. They were scattered over 1,363 counties in 43 States. About 15,000 loans, totaling $55 million, were made in drought areas; another 7,000 loans, totaling $23 million, were made in areas hit by flood, hail, and violent windstorms.

Although families hit by a major disaster are usually left in deep financial distress, the repayment record of FHA emergency loans has been astounding.

Over the past 15 years 404,976 emergency loans totaling $873 million have been made to rural families. Repayment of principal and interest total $785 million. More than 95 percent of the amount due has been paid on schedule.

## RESEARCH AND EDUCATION

Research and education, for more than a century, have provided the foundation for the revolutionary changes which made our agriculture great.

### Improving Production Efficiency

Continuing this century of service, USDA research in 1965 supplied commercial farmers with several new techniques for more efficient production.

Through a chemical added to feed farmers may be able to control the hog reproductive cycle. This will enable them to speed the upgrading of swine herds through artificial insemination.

Other contributions to more efficient livestock production include a procedure for estimating the digestibility of forages for beef cattle, an economical grass-legume pasture mixture for dairy cattle in the Midwest, and an improved design for feedlots using sloping floors that are partially self-cleaning.

The campaign to eradicate screwworm continues. Prior to 1962, this pest infested a million head of livestock annually. To combat it researchers reared from 100 to 130 million screwworm flies a week, sexually sterilized them, and released them to overwhelm the native population. Now the entire United States except for Arizona and California is free of over-wintering screwworms. The same method is being used in those two States to wipe out the pest completely. We are also working with the Republic of Mexico to prevent reinfestation by eliminating screwworms in northern Mexico.

During the year Nevada became the second State to eradicate hog cholera. In the 13 States producing 85 percent of the Nation's hogs, reported outbreaks of the disease declined more than 50 percent. Forty-five States, Puerto Rico, and the Virgin Islands are now free of scabies, a disease of sheep. The time is approaching when brucellosis and tuberculosis will also be wiped out.

Crop research moved forward with equal success. Our plant breeders incorporated disease resistance and improved production characteristics in new varieties of rice, cotton, tobacco, rye, tall fescue, and orchardgrass released during 1965. They also made progress toward weevil-resistant alfalfas, sugarbeets that resist attack by cyst nematodes, and commercial cotton varieties with no gossypol, a substance that now limits the use of cottonseed products in foods and feeds.

The first treatment in a Federal-State-industry effort to eradicate the boll weevil from the Texas High Plains reduced winter survival of the insect by 90 percent; and did it without harm to wildlife or fish.

Research sponsored at the Iowa Agricultural Experiment Station by our Cooperative State Research Service developed a plant regulator that increases yields of soybeans. Applications of less than 1 ounce per acre enable soybean plants to use plant nutrients more effectively. In the past soybean yields have increased only 15 percent from fertilizer applications, in contrast to corn where yield increases from fertilizer range up to 60 percent. This may provide a breakthrough in soybean production.

We announced during 1965 a more efficient device for removing weed seeds and trash from grain as it is combined. Our engineers also designed a portable solar-heat collector which uses energy from the sun to dry grain in small bins.

In basic research, science took a long stride toward understanding how plant and animal cells manufacture protein when researchers at USDA and Cornell University determined the molecular structure of a ribonucleic acid. These acids act as a kind of genetic code determining the inheritance of all living things. Understanding of nucleic acids may lead to control of disease and genetic defects. For example, it's likely that cancer cells grow because of nucleic acid malfunction. Many scientists believe further research will provide the key to modifying the structural makeup of nucleic acid, thereby enabling man to govern the genetic characteristics of all life.

Another important advance in basic research was the identification of the "switch" that starts and stops many plant growth processes. The

"switch" is the pigment in a plant-protein molecule called phytochrome, the activity of which depends on the kind of light received by the plant. Using this knowledge, farmers may one day be able to harvest crops at a time of seasonal shortage, rather than during normal unregulated periods of peak supply. Florists are already using it to regulate plant growth to induce flowering out of season.

### Improving Marketing Efficiency

Our engineers have developed new procedures to speed boxcar loading and the handling of soybeans in country elevators. Other research increases efficiency in wool warehouses and reduces the labor required for handling bales in cotton warehouses. Farmers and hay buyers will profit from an improved method for measuring the moisture content of hay.

*New foods:* Over the past decade the food industry has introduced many new food products. More than half of the food items in retail food stores today were not there in the same form 10 years ago. But for each new product that succeeded, five others failed. This concerns farmers and consumers, as well as food processors, because the failures increase the cost of the products that succeed. We have developed criteria to evaluate the likelihood of success for new products while they are still in the development stage.

*Cotton:* Legislation enacted in April 1964 improved the competitive price position of American Upland cotton in the domestic market by reducing the net cost of raw cotton to users. Domestic cotton consumption increased substantially during the 1964–65 crop year, but a sharp decline in exports more than offset this increase. We have intensified our analyses of foreign outlets for U.S. cotton, examining the factors influencing exports and developing equations for forecasting foreign acreage, production, and consumption of cotton.

*Beef:* Our researchers made a special study to determine the position and probable direction of the cattle cycle and of beef cattle numbers. Historical relationships between cattle numbers and prices, together with information available in late summer 1965, indicated that beef cow and calf numbers would level off during 1966. The study also indicates that beef cow and calf numbers will drop when feeder calf prices remain below $21 for a sustained period.

*Low-fat milk:* Sales of low-fat milk are partly offsetting the decline in whole milk consumption and bringing slightly higher returns to producers and processors. Research shows that in areas where it is available, sales of low-fat milk equal or exceed those of skim milk. The new product is gaining popularity with dieting and weight-conscious consumers because it has more flavor and a more desirable consistency than skim milk, but fewer calories than whole milk.

*Soybeans:* The growing importance of soybeans in feed and fats and oils led us to initiate work on the demand for soybean meal. Preliminary results indicate that a 10 percent increase in the price of soybean meal is associated with a 6 percent decline in use. A 10 percent decrease in the price of cottonseed meal, the nearest competitor, reduces consumption of soybean meal by about 3 percent.

### Facts Are Needed for Production and Marketing Decisions

Through about 700 timely reports published during 1965, our Statistical Reporting Service informed producers, processors, and consumers about the quantity and location of agricultural commodities. This information was based on reports submitted voluntarily by nearly a million farmers and businessmen throughout the country and assembled by the State offices.

To add to the precision of their estimates, our statisticians are constantly using new techniques. In June 1965, about 50,000 scientifically selected farms were visited in a nationwide enumerative survey—the second year of this coast-to-coast survey—to obtain data on planted acres, livestock numbers, farm wages, and labor. These data increase the accuracy of our crop and livestock reporting.

In years past, it was enough to know the number of livestock on U.S. farms on January 1, compared with earlier years. Today's rapidly changing technological developments in farming and marketing make necessary more detailed and more frequent livestock reports. Cattle feeding, for instance, is now primarily a continuous operation with cattle and calves moving in and out of feedlots during all seasons of the year. To meet the demands for more frequent reports, we have expanded our quarterly cattle-on-feed report from 21 States in 1959 to 32 today. Five of these States now make monthly reports as well.

> The new methods of crop and livestock reporting require modern electronic data processing to get the work done within strict deadlines. Starting out with rented equipment in 1958, our Washington Data Processing Center, using its own equipment in its own quarters in the South Agriculture Building in Washington, expects to reduce anticipated costs of data service by nearly $10 million in 1966.

### Meeting the Educational Challenge

The Cooperative Extension Service takes the knowledge and techniques developed in agricultural research centers and carries them to farmers throughout America.

The grassroots disseminator of the new knowledge and techniques is the county Extension agent. In addition, however, many States also have highly trained area agents to meet the needs of specific segments of agriculture.

> In one section of Kentucky the annual income of hog producers rose $1.3 million after area agents went on the job. The proportion of hogs graded No. 1 increased from 20 to 80 percent. This reputation for high-quality lean-type hogs brought more buyers into the area and with them higher prices for farmers. Other changes, too, are attributed to the program: It now takes a half pound less feed to produce a pound of pork and an average of an additional half pig is saved per litter.

*Schools and Workshops Save Money:* More than 100 Extension-sponsored statewide schools were conducted to explain the revisions in USDA standards for wheat to 20,000 farmers during 1965. These schools were supplemented by hundreds of additional local and community grading schools for other grains.

Knowing how to use standards helped increase the annual income of soybean producers in South Carolina by more than $13 million.

Commodity groups in 40 States spend more than $100 million annually to promote the sale of agricultural products. Extension Service training sessions show them how to get more for their advertising dollars.

Transportation education programs have reduced costs for many segments of agriculture. Extension marketing specialists in Maryland and Delaware helped lower feed grain freight rates, saving poultry producers more than $2 million a year.

Marketing studies help the wood products industry in North Carolina and Georgia save over $300,000 annually. Improved operating efficiency at a lumber manufacturing firm in North Carolina has cut costs $45,000 per year. Better ways of processing and handling materials are returning a Georgia wood-using firm an additional $197,000 per year.

Extension Service workshops show farmers how to reduce costs and increase efficiency through better farm management. Four grain and feed firms in Indiana applied information obtained at worshops and saved more than $200,000. Three other Indiana firms reduced costs more than $35,000 per year through better handling of bulk feed. A South Dakota feedmill increased its volume 30 percent and reduced costs of feed 93 cents per ton. Another firm increased its business 40 percent and reduced feed manufacturing costs $1.31 per ton.

> Farmers in 31 States now use the electronic farm accounting programs of the Cooperative Extension Service. The "Telfarm" program in Michigan has the potential to increase average net income of Michigan farmers by $500 to $1,000. Available to any commercial farmer in the State, the program offers services ranging from simple income tax reporting to a complete enterprise analysis embracing detailed enterprise accounts, credit accounts, labor accounts, and even home management business records. In 1965, 1,130 Michigan farmers were taking part.

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The American farmer has achieved unparalleled success in making the land produce an abundant harvest year after year. But he has done this through an economic system that tends to treat abundance as excess and consequently levies a penalty on it. For many years what the American farmer has reaped from his rapidly increasing efficiency and productivity is a harvest of low income.

The essential task of farm policy has been, and is, to find some special glue to hold together an agricultural industry that can be both productive and prosperous. The programs we have been discussing—whether they relate to commodities, to production and marketing efficiency, to stronger bargaining power in the marketplace, to conserving and improving natural resources, or to research and education which give individual farmers new know-how—are all concerned with this fundamental task of farm policy. They have helped make our adequate family farms

stronger—in numbers, in productivity, and in potential for future service to America.

We believe that our family farm system will continue to be the most productive form of agriculture, as well as the best social structure for rural America. We know that our family farm productivity has supplied much of the foundation on which American abundance as a whole is ultimately based. We hope that our family farm abundance and know-how will have increasing impact on world peace, security, and economic development.

That is what we discuss in the next segment of this report.

## FOREIGN TRADE AND AID

Exports of U.S. agricultural products in fiscal 1965 set a new record in excess of $6 billion for the second consecutive year.

Our exports were stimulated by

—A continuing upsurge in consumer buying power in major world markets.

—The diversion by U.S. competitors of large amounts of grain to the USSR and Communist China.

—Bad weather in Europe, which enlarged demand for imported grain, meat, and dairy products.

—Continued abundance of most U.S. farm commodities, making supplies available for export at competitive prices.

—The Department's aggressive promotion program in 67 countries.

Offsetting these stimuli to some extent were stronger foreign competition in cotton, tobacco, and wheat; growing agricultural protectionism in some importing countries, especially the European Common Market; and a better wheat crop in the Soviet Union, which had made large grain purchases from us the previous year.

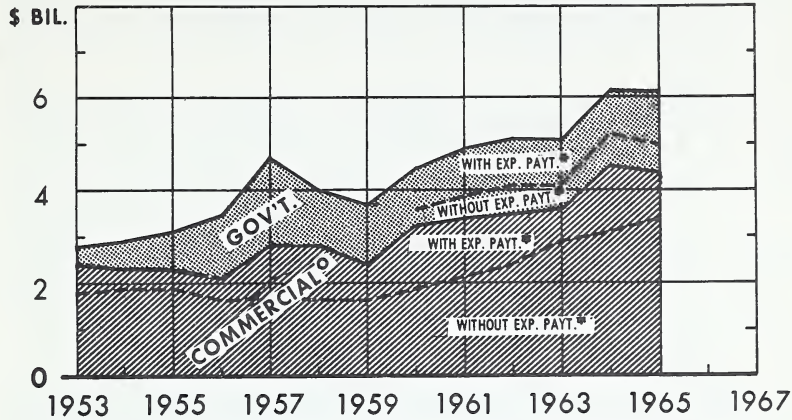
### AGRICULTURAL EXPORTS

U.S. agricultural exports during fiscal 1965 were about $6.1 billion. The total was slightly more than in 1964, and almost two-fifths above 1960. Practically all of the gain since 1960, moreover, has been in cash sales to dollar markets. Commercial sales for dollars in fiscal 1965 totaled $4.4 billion, about three-fourths of the value of all our agricultural exports. We exported another $1.7 billion worth of commodities under special terms of the Food for Peace program to meet food needs and stimulate economic development in friendly nations.

Sales of corn, soybeans, vegetable oils, tallow, and hides and skins all rose sharply. Feed grain exports, excluding products, approached $1 billion ($940 million), nearly $125 million above the 1964 high. Exports of oilseeds and products, mainly soybeans, reached $1.1 billion, far above the previous record of $846 million established just a year earlier.

# U.S. AGRICULTURAL EXPORTS

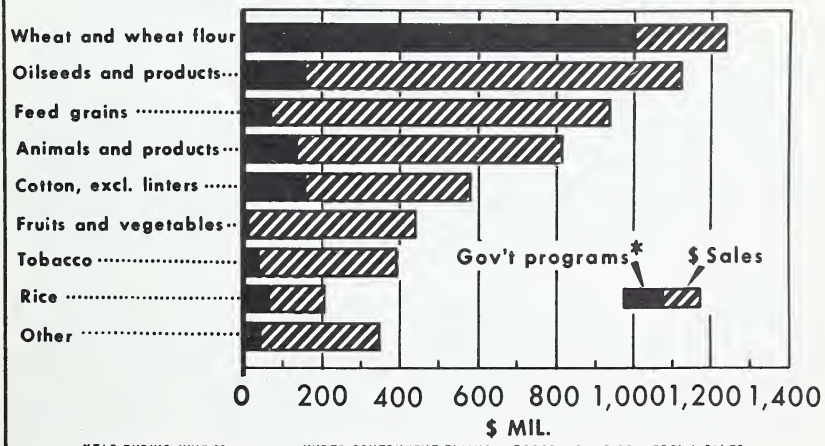
*Commercial, and Under Specified Government Programs With and Without Export Payment Assistance*




*"EXPORT PAYMENTS" INCLUDE PAYMENTS IN CASH OR IN-KIND AND SALES FROM GOVERNMENT OWNED STOCKS AT LESS THAN DOMESTIC MARKET PRICES. DATA FOR EXPORT PAYMENTS UNDER GOVERNMENT PROGRAMS ARE NOT AVAILABLE BEFORE 1960. YEAR ENDING JUNE 30. °DOLLAR SALES.

U. S. DEPARTMENT OF AGRICULTURE NEG. ERS 2493 X-65 (7) ECONOMIC RESEARCH SERVICE

# U.S. AGRICULTURAL EXPORTS BY COMMODITY GROUP, 1965




YEAR ENDING JUNE 30. UNDER GOVERNMENT FINANCED PROGRAMS AND COMMERCIAL SALES.

*P.L. 83-480 AND P.L. 87-195.

U.S. DEPARTMENT OF AGRICULTURE NEG. ERS 2906 X-65 (7) ECONOMIC RESEARCH SERVICE

Sales of inedible tallow, variety meats, and hides and skins also climbed to new peaks while exports of many other products were at near-record levels.

Our agricultural exports are big and growing bigger. One out of every four U.S. harvested acres now produces for foreign markets. The value of our agricultural exports in fiscal 1965 equaled one-sixth of the total cash receipts from all U.S. farm marketings.

In addition, farm export dollars pay wages and buy machinery, fertilizer, oil, gasoline, and all the other supplies farmers need. They also provide a significant assist to the Nation's balance of payments situation. From 1960 through 1964, agricultural exports accounted for 21 percent of total U.S. commercial exports—and for over 30 percent of the improvement in dollar-earning exports. In fiscal 1965, the U.S. had a favorable balance of trade (exports over imports) of nearly $6.6 billion, with agriculture accounting for almost one-third of it.

### Market Development

One factor in the rapid growth of U.S. agricultural exports—nearly two-fifths in 5 years—has been a vigorous foreign market development program.

Our Foreign Agricultural Service, which carries major responsibility for market development abroad, cooperates with some 50 agricultural trade organizations in 67 countries around the world. In 1965 the USDA and these trade organizations put about $15 million into this work.

Market development has stimulated increased sales of soybeans and their products to Germany; wheat, feed grains, and poultry to Japan; feed grains to Italy and Spain; rice to Western Europe, Japan, and South Africa; and soybean oil to Spain.

It has helped change Japanese eating habits and has made Japan our biggest dollar market for exported wheat. Japan's purchases of U.S. wheat have risen from 30.4 million bushels in 1961 to 61.9 million bushels in 1965.

Promotional efforts of USDA-sponsored cooperator groups in the U.S. wheat industry showed the Japanese how to use wheat—how to bake with wheat flour—and how to broaden its usefulness. One of the most helpful trade promotion approaches was the Japanese school lunch program. This had notable success in showing how wheat products could help give children a protein balanced diet.

During 1965, U.S. agricultural products were promoted at trade fairs in Cologne, Brussels, London, Madrid, Blackpool, Verona, Cremona, Manchester, Luxembourg, and Tokyo; and through five trade shows at the U.S. Trade Centers in London, Tokyo, and Milan. We placed major emphasis on commercial contacts between U.S. suppliers and foreign buyers.

Special 2-week promotions were held in leading stores throughout the United Kingdom. These resulted in sales gains of 50 to 200 percent in U.S. items during the promotions.

An all-time high in trade attendance at any Department-sponsored international exhibit was set when more than 7,000 persons from the trade attended a processed foods show at the Tokyo Center.

Since our first USDA trade fair exhibit in Cologne, Germany, in 1955, the Department has sponsored about 170 exhibits in 35 countries, with a total attendance of more than 50 million persons.

Our exhibit at the Salon de l'Alimentation, a big international food fair in Brussels during October–November 1965, typifies these activities.

Representatives of 75 American firms, order books in hand, showed over 350 U.S. food products to foreign buyers.

Reports from these firms show that this exhibit and another large one in Cologne, Germany, brought $4 million in on-the-spot and future orders.

Fresh fruits and vegetables flown by jet from California gave Europeans a foretaste of the variety of U.S. produce increasingly available to them under new lower air freight rates.

A steak restaurant, managed for USDA by a leading U.S. restaurant organization, served a dinner featuring U.S. choice-grade sirloin steak plus baked potato, iceberg lettuce, fresh strawberries, and wine.

In addition, U.S. poultry and methods of cooking it were demonstrated. The public bought turkey sandwiches and fried chicken drumsticks. Rice, honey, and soybean products were also promoted.

Market development, however, involves more than promotion. For example, the present acceptance of U.S. soybeans in traditional Japanese foods is due in part to better quality soybeans produced through research. Over 10 percent of the soybeans exported to Japan are now used in shoyu, tofu, and miso—staple foods for which none of our soybeans was used prior to 1958. New techniques for maintaining the flavor in soybean oil will further expand overseas use in cooking and salad oils.

Other new and improved products for the export market are coming from our laboratories. A low-cost process for producing white bulgur from wheat should open new markets in areas overseas where consumers discriminate against the darker colored bulgur made by an earlier process. Two new processes may open additional markets for rice in developing countries. One process makes high protein rice flour by "deepmilling," the other produces flour from parboiled rice for use in baby foods.

Quality counts in exports fully as much as in domestic trade. We inspect meat and poultry and assure the health status of livestock for export. During 1965 our animal health inspectors certified that 34,500 animals for export were free of disease and were handled so as to arrive at destination in good condition. Air shipment of milk-fed calves to Europe raised new health hazards. These were minimized by new export requirements announced during 1965.

Much export trade is carried on by cooperatives. To date cooperatives have won 10 Presidential E Awards—about a fourth

Europeans watch as butchers prepare cuts of U.S. beef.

U.S. food provides a better lunch for children in India.

of the total given to agricultural firms and associations in recognition of outstanding efforts to expand efforts.

We work with cooperatives in other countries, too. In September 1965 we entered into a sales agreement with a Spanish cooperative federation representing 900 member associations and 200,000 farmers. We will sell the Spanish cooperative $35 million (600,000 metric tons) worth of U.S. feed grains on long-term credit during the next 3 years, as well as substantial materials and equipment for building up the Spanish livestock industry.

The cooperative in turn will sell the grain to livestock producers and use the proceeds to finance facilities for feed grain and mixed feed processing and distribution and to improve marketing facilities. Revenues from these operations will be used to repay the U.S. in dollars.

The following are a few highlights of export "development" during fiscal 1965:

*Record Rice Exports:* With rice exports reaching a record 1.5 million metric tons, the United States may soon become the world's second largest rice exporter, exceeded only by Thailand.

*More Turkey Exports to Italy:* Market promotion has produced a major market for U.S. turkey in Italy. Annual sales are approaching 6 million pounds, about 10 times the 1962 level.

*Poultry Export Quality Program:* More than 100 firms have signed up for an industry-wide quality identification program to increase U.S. poultry exports through quality emblems for shipments abroad.

*Breeding Cattle Exports at New High:* Cooperative market promotion by the Department and livestock breed associations pushed exports of both beef and dairy breeding cattle to new record levels.

*Calf Airlift to Italy Resumed*: Air transport of baby calves to Italy resumed after a lull caused by higher prices and health problems. Exports during the year were well above 2,000 head.

*Nonfat Milk Exports Soar:* Exports of nonfat dry milk to the Netherlands for use in veal calf rations reached 255 million pounds. Total sales to Europe are estimated at 400 million pounds—up from 73 million pounds 3 years ago.

*Eastern Europe Buys U.S. Feed Grains:* Eastern Europe is a new customer for U.S. feed grains, and probably will take as much as 1 million tons during fiscal 1965–66.

*Spring Wheat Moves to Japan:* Reductions in freight rates to the West Coast resulted in substantial purchases of spring wheat for the first time by Japan.

### Food for Peace

During fiscal year 1965 U.S. exports of farm products under the various Titles of Public Law 480 (the principal Food for Peace vehicle) rose to $1.7 billion, nearly $100 million more than during the previous fiscal year.

We intensified our efforts to shift from sales for foreign currency to long-term dollar credit sales. Greece, Iran, Taiwan, Ivory Coast, Ecuador, Iceland, Paraguay, Bolivia, Syria, Yugoslavia, and Ethiopia—all formerly foreign currency customers—

now buy all or part of their needs through long-term dollar credit. Sales under this program, which totaled $56.7 million is fiscal 1962, climbed to $189 million in 1965.

We are continuing, of course, to make foreign currency sales to less developed countries. This enables them to obtain critically needed agricultural commodities without secrificing scarce foreign exchange that is vitally necessary for capital imports and overall economic development. About 40 percent of total U.S. Government overseas economic development assistance is provided through agricultural commodities and the local currencies received from sales of these commodities under Public Law 480.

Exports made under this law also help us develop commercial markets for agricultural products by introducing foreign consumers to U.S. foods. We use available foreign currencies instead of U.S. dollars for specific market development activities.

The barter program, another feature of Public Law 480, emphasizes the exchange of surplus agricultural commodities for foreign goods and services required by various U.S. Government agencies. During fiscal 1965, barter procured goods and services worth $29.4 million for the Agency for International Development and $107.6 million for the Department of Defense.

All but 2 percent of the food aid supplied to countries around the world in roughly the past decade has been provided by the United States. We have shared 150 million tons of food, and have helped people in 115 countries. We have sought not only to allay hunger, but also to assist in the development of schools, public and private enterprises, hospitals, roads, and the other elements of economic growth which provide the opportunity for a better life.

Only four other countries—Canada, Australia, France, and West Germany—have furnished food aid on a bilateral basis. Of these, Canada has been the principal donor, supplying most of its food aid through the Colombo Plan.

A 3-year experimental World Food Program is now providing food primarily to implement pilot projects related to social and economic development. To date, the United States has contributed slightly more than half of this program's resources.

At the year's end, it seemed apparent that special food needs would have to be met in India, which was face to face with its worst drought of the 20th century.

## SPECIAL TRADE PROBLEMS

In this area the spotlight has been focused largely on Brussels and Geneva.

At Brussels, the movement towards a Common Agricultural Policy for the European Economic Community came to a halt as France abruptly recalled its representatives to the Commission in late June 1965.

Before this event, however, several new agricultural policies were developed by the EEC which could have long-term adverse effect on our agricultural trade. A new EEC Common Agricultural Policy for live cattle, beef, and veal went into effect November 1, 1964. It provides for variable levies which may be applied if average market prices are less than 5 percent above guide prices set for these products. This could stimulate increased EEC livestock production, causing traditional EEC suppliers to seek export markets in the United States.

EEC import policies went into effect for dairy products and rice. The new dairy products policy will encourage larger production in the EEC. However, this will have less impact on the United States than similar action on grains, since U.S. dairy sales in EEC countries have not been substantial. While the variable levy system for rice has not yet had any drastic effect on U.S. exports, future prospects are made uncertain by provisions regulating rice imports.

At Geneva the discussions on agriculture in the Kennedy Round of negotiations, designed to reduce barriers to international trade, moved ahead very slowly. These negotiations under the General Agreement on Tariffs and Trade have brought into sharp focus our problems of trade access with the European Economic Community.

The EEC is now a billion-dollar-plus market for U.S. farm products. But it has adopted an agricultural policy which places a shadow over that market by putting the United States, and other outside producers, in the role of residual suppliers.

The EEC's agricultural negotiating position at GATT is based upon perpetuation and expansion of its variable levy system. It proposes to freeze price supports, for example, on grains, at very high levels. Certainly such action would not meet the test of trade expansion. The U.S. approach, by contrast, is based on the objective, which many nations share, of lowering barriers and expanding trade in agricultural products.

The problems created by these two sharply different approaches are complex and serious. The direction in which they are resolved will ultimately have a significant effect on future sales of U.S. farm products to this important dollar market. Thus, in 1965, trade access problems dominated the work of a number of our top professional people.

The Department's continuing effort to eliminate trade barriers against U.S. agricultural products is carried out in close cooperation with the Department of State, working through existing diplomatic channels. Our agricultural attaches, stationed in 60 countries, are also heavily involved in efforts to promote liberalized trade.

Some strides were taken to eliminate trade barriers against U.S. farm products during 1965. Countries which relaxed import restrictions against U.S. agricultural commodities included Aus-

tria, the Benelux nations, Denmark, Finland, France, West Germany, Italy, Norway, Spain, and the United Kingdom.

We must also keep alert to the emerging nations and encourage them to embark on the waters of international trade. In the world of foreign trade, miracles do happen. We are witnessing countries with weak economies gain new strength. Indeed, we are seeing a degree of agricultural expansion in some developing nations which is not only astonishing but full of hope for the future.

## TECHNICAL AID AND TRAINING

The problem of world hunger can never be solved until the world's farmers learn how to produce and market much more through modern techniques—proper use of fertilizers and pesticides, improved plant varieties and breeds, soil conservation and irrigation, tools and other equipment, credit, cooperatives, and better food storage and distribution.

A major difficulty in the developing nations is the small number of individuals technically trained in agricultural skills. Equipping more people with these skills and knowledge is a major part of USDA's technical assistance program.

About 5,000 technicians, scientists, teachers, editors, and administrators from other countries were brought to the United States for training during calendar year 1965.

Our assistance is related closely to the participants' own countries.

> Twenty-four Nigerians working toward degrees in the United States attended a special short course designed to teach them: Proper use and care of hand tools suitable in Nigeria; simple repair, care, and use of harness and ropes; improvement of sanitation and water supply; elementary electricity; simple projects in wiring and an appreciation for the necessity of proper wiring; and the care and safe operation of small gasoline engines and electric motors.

Since "education" will be a primary responsibility of many trainees once they return home, we plan and carry out communication seminars in conjunction with land-grant universities. Here again the courses recognize the limitations of staff, materials, and finances likely to confront students on their return. Students construct visual aids out of materials probably available at home. They are designed with each participant's home clientele in mind.

Extension teaching courses consist largely of simulated extension meetings—such as field agents will conduct in their own countries—with evaluation by fellow students.

Our 1,600 foreign trainees from 92 countries received this type of extension training in 1965. About one-third were professional extension workers or had major responsibility for extension work in their home countries. Others were technicians desiring training in agricultural extension. Trainees were both men and women.

In addition to technical training these key individuals from developing nations learn much about American people, the American way of life, and the environment in which our agricultural industry operates.

> An Argentine agriculturist said: "Our group, whose idea of the North American system of life was very unrealistic, has completely rejected the notion of the 'bogeyman of North American imperialism' (el cuso del imperialismo norteamericano). We have seen with our own eyes how its people work and live. We have been won over by their kindness and helpful courtesy; and, finally, we have found out that they are not people from 'outer space' (sares de otro planets); they are simply the same as we are. I think there ought to be more of these visits."

### 4–H Around the World

The "extension" concept is further promoted through youth exchanges and youth conferences. About 80 countries in widely separated areas of the world now have 4–H type organizations. Over 3,700 young men and women have had the experience of living for a time in 68 different countries of the world through the International Farm Youth Exchange program since IFYE started in 1948.

### On-the-Spot Technical Guidance

Some 200 USDA specialists offered technical advice and guidance to governments of 26 countries in fiscal 1965. About half of these specialists were members of resident teams assisting on many fronts of agricultural development—forestry, agricultural economics, cooperatives, extension, research, credit, conservation. Resident technicians are assigned to countries for 2 years or more where they work with members of U.S. AID Missions.

Our International Agricultural Development Service and other USDA agencies carefully study each request for assistance to find how the Department can provide the most effective help. Often, at a country's request, a team of USDA specialists is sent to the country to make a preparatory on-the-scene evaluation.

We have 21 USDA specialists in credit, agricultural economics, cooperatives and marketing, price stabilization, and soil conservation working in Brazil. In addition, 16 short-term consultants have been provided to date for assignments ranging from 2 weeks to 6 months in price stabilization, credit, animal disease control, soil conservation, marketing, and cooperatives.

Agricultural teams this past year have helped Honduras combat the pine beetle which is killing thousands of giant pines daily.

Nine technicians worked in Nigeria to aid in the establishment of credit facilities and water and soil management.

The Indian Government and AID asked USDA aid in developing a price incentive program for foodgrains. During the year a total of 12 USDA specialists spent from 2 weeks to 3 months assisting the Indian Government in price stabilization and agricultural organization. A "Food Corporation" has been set up, patterned after our CCC.

In El Salvador technicians have been working to open up new farming areas, on better crop varieties, insect control, resettlement, irrigation, marketing, agricultural credit, and extension. A 5-year development plan has been formulated. Programs to improve livestock, poultry, and fish ponds are aiming at better diets through a substantial increase in protein foods for El Salvador's rapidly growing population.

USDA technicians are helping diversify production. "Campesinos" who formerly produced only corn and beans for family use are now growing tomatoes, cabbage, peppers, lettuce, and carrots for the market in San Salvador.

Our technicians are also working with the El Salvadorians to develop a roadside farmer's market for selling these vegetables, while AID has helped establish a small but complete food processing plant to can, freeze, and dry lower quality vegetables not adapted to fresh market sale.

### Research

Our scientists are guiding and otherwise assisting in research projects to produce better crops and livestock adapted to the needs of specific regions. The developing countries contribute resources, funds, and personnel.

The following projects are typical: *Better sorghum, millet, and maize* (corn) are being developed in two regional centers of East and West Africa where sorghums and millet are the predominant cereals and over 55 million people get more than half their calories from sorghum.

*Tsetse fly control.* These flies, carriers of trypansomiasis in humans and livestock, are a major obstacle to Africa's economic development. Present controls are costly, have undesirable side effects, or are ineffective. We are building on recent ARS research in this country involving the use of sterile males to control insect population.

*Improved grain legume production in the Near East, South Asia, and Far East.* We are working to improve productivity and quality of chickpeas, pigeonpeas, and several other protein-rich legumes. India's present per acre yields of chickpeas and pigeonpeas are only one-third of yields obtained elsewhere.

*Better vegetable protein food technology.* In collaboration with UNICEF, Food and Agriculture Organization, World Health Organization, Food for Peace, the food industry and other agencies, we are seeking techniques to help less developed countries produce better oilseed proteins. Soybeans, cottonseed, and peanuts are getting special attention.

## POSSIBILITIES FOR FUTURE WORLD MARKETS

In the *World Food Budget, 1970,* published in October 1964, we presented the results of a study covering world food supply and use, food needs, and the problems and possibilities of closing the food gap. The study projected food "balances" for 92 countries. It indicated that a large part of the world's people in 1970 would be living in countries with nutritionally inadequate national average diets.

We have revised the World Food Budget projections for U.S. exports of major food commodities and extended the projections to 1980. On the basis of recent growth in foreign commercial markets and some expansion of our food aid programs, we could expect U.S. agricultural exports to increase substantially over this period. We can look for important gains in exports of grains, soybeans, soybean oil, and livestock products.

### Foreign Economic Growth and Market Potentials

Our Economic Research Service has been studying the relationship between income growth abroad and U.S. agricultural exports. On the basis of trade and income data from 1938 to 1959–61, we find that U.S. agricultural exports increased about 11 percent for each 10 percent rise in the per capita income of foreign countries.

In the past, our best export markets for agricultural products have been the highly developed countries. With larger incomes per person, they can demand and pay for a larger volume and variety of farm products. Our agricultural trade with the developed countries may continue to grow about in line with their increasing national incomes, particularly if we succeed in international trade negotiations.

In the future, however, the most rapid relative growth in markets for our farm and forest exports will come in the developing countries. Population there is increasing more than twice as fast as in the more highly developed nations. Most of the people are underfed, poorly clothed, badly housed. Their tremendous need for more food and fiber will be translated into market demand—provided only that economic growth can be stimulated and incomes increased.

Our commercial agricultural exports to the 1.3 billion people in less-developed countries (1938 to 1959–61) increased about 16 percent for each 10 percent increase in per capita income. Currently, however, these exports average only 50 cents a person, compared with over $5 per person in the developed countries.

Clearly, American agriculture has a great stake in world economic growth. Large potential markets for our farm products exist in Latin America, Asia, and Africa. But these markets can become effective only through economic growth and rising income. Even small increases in income would have large effects on imports.

## CAN VICTORY OVER HUNGER BE WON?

While many persons may feel that there is less cause for optimism in the war against hunger today than at any time in recent decades, I do not agree. I believe it is possible to win the war against hunger within the next 10 or 20 years.

This hope arises out of an analysis of the efforts and progress made by many newly developing nations in improving their agricultural productivity.

To provide information needed in planning agricultural development programs, we have analyzed changes in output and productivity in 26 emerging countries. These included 7 nations in Latin America, 5 in Africa, 4 in Europe, 6 in the Near East and South Asia, and 4 in the Far East.

Between 1948 and 1963, 12 of these 26 countries had annually compounded rates of increase in crop output ranging from 4.2 percent to 9.7 percent, and averaging 5.6 percent. These rates of increase surpass those ever achieved over equally long periods in nations now economically well advanced. For example, our U.S. increase even during the war years when our national policies were directed toward all-out production, averaged less than 3 percent.

The 12 nations are: Sudan, Mexico, Costa Rica. Philippines, Tanganyika, Yugoslavia, Taiwan, Turkey, Venezuela, Thailand, Brazil, and Israel. They represent Africa, Asia, the Far East, the Near East, Latin America, and Europe.

Some of these 12 countries are tropical, some semitropical; others lie in temperate climatic regions. They differ greatly in rural population densities and in their potential for expanding acreage under cultivation. Some have achieved most of their progress by increasing yields, others by increasing crop area. They differ in levels and stages of economic development. Some have had much smaller per capita incomes, much lower levels of literacy, and much less adequate educational systems than other nations among the 26 that have improved agriculture very little.

The common factor that seems essential to success is a national will to strengthen agriculture—a strong enough determination to adopt policies and programs that make the most of conditions and resources at hand. Geographic, economic, and social conditions; land, labor, and capital: These are all important factors, but they do not by themselves determine a nation's growth, either in agriculture or in general economic development. It is rather the responses and adaptations to those conditions—the policies and programs which are followed—that determine progress.

I believe there are important lessons to be drawn from this study.

First, there is no inherent reason why most of the newly developing countries cannot within the next decade or two so increase their food and fiber production as to meet the growing demands of their citizens and have enough additional food or food-producing resources to contribute substantially—through trade and nonfarm employment—to general economic development.

Second, studies and research involving social and economic factors, political relationships, and administrative organizations as they affect agricultural development may be fully as important as scientific studies of plants, animals, and soils. If we can learn more about what kinds of policies and programs make for

greatest success under varying conditions, we can progress more rapidly toward our goal of victory over hunger.

We need more study—and we need more action.

Not all of the barriers to progress are in the newly developed countries. Within the highly developed countries there is still too little recognition of the urgent importance of eliminating world hunger, of the critical need for agricultural development in most of the hungry world, and of the long-term benefits these nations will gain as they help newly developed countries achieve more of the benefits of modern civilization.

We know now that hungry nations determined to improve their own agriculture have a good chance for success. But we are concerned that more rapid progress should be made. The difficulties ahead demand our best effort. Given that, victory over hunger can be won.

## TOWARD A RURAL RENAISSANCE

At the start of the century over half our people lived in rural America. Today nearly three-fourths of our population is urban.

Actually, over the past 50 years the size of our rural population has changed little. Each decade, however, more and more people thronged into urban areas, until today it seems that we accept the crowded city as an inflexible attribute of modern living.

If this trend continues there will be as many of us in 216 cities by 1985 as there were in the entire Nation in 1960—or enough additional people in cities to stack 5 New Yorks on the present New York, or 27 Washingtons on the present Washington.

This would mean more social and economic ghettos; more urban sprawl on the edges of cities created by those who can run, but not very far, from the center; more impatient traffic inching along more congested streets; more smog in the air and more filth in the water.

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What is the cause of this mass exodus from countryside to city?

The answer is: Opportunity—the lack of it in rural America and the comparative abundance of it in urban America.

Where are the job opportunities, industrial and professional, that offer a challenge, plus steady advancement and higher pay?

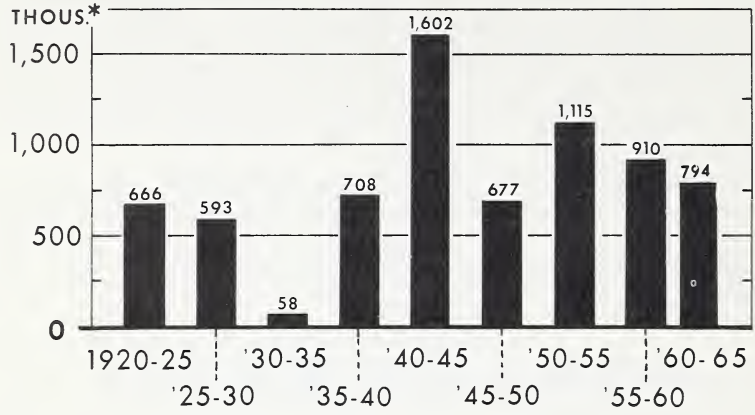
Where are the modern schools, theaters, museums, libraries, and public services that provide a life of higher quality?

The answer has been, and still is, in the city.

The growth of opportunity in our cities has been matched by the decline of opportunity in the countryside.

Rural people earn less for a day's work than urban people. Rural people are twice as likely to be unemployed as urban

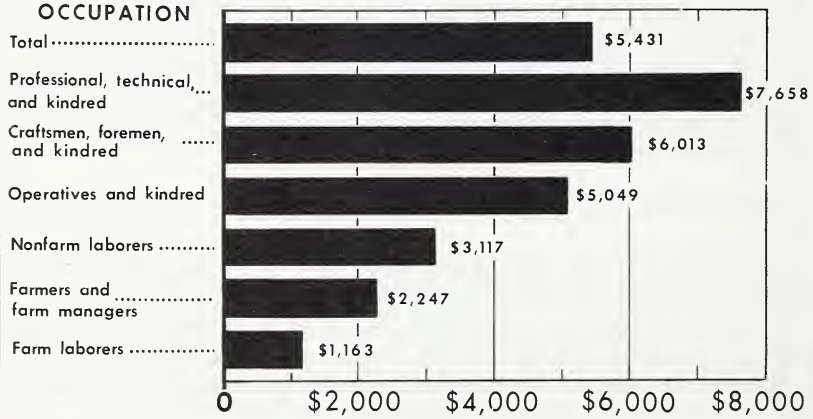
# AVERAGE ANNUAL NET OUTMIGRATION FROM THE FARM POPULATION




*NET CHANGE THROUGH MIGRATION AND RECLASSIFICATION OF RESIDENCE FROM FARM TO NONFARM.

U. S. DEPARTMENT OF AGRICULTURE NEG. ERS 2089-66(1) ECONOMIC RESEARCH SERVICE

# MEDIAN EARNINGS OF MALES BY OCCUPATION, 1964




MEDIAN EARNINGS IN 1963 FROM EMPLOYMENT, INCLUDING SELF-EMPLOYMENT, OF MALES IN CIVILIAN LABOR FORCE.

*DATA FROM BUREAU OF THE CENSUS.*

U. S. DEPARTMENT OF AGRICULTURE NEG. ERS 3762-65(6) ECONOMIC RESEARCH SERVICE

people. When unemployed they are less likely to be collecting unemployment insurance.

Rural health services do not begin to compare with those available in urban areas. As a Nation, we are short of doctors, nurses, and other medical personnel, but rural areas are hit disproportionately by the shortage.

One out of 4 rural homes today needs major repairs or replacement. Over 4 million rural homes do not have running water. Nearly 30,000 rural communities lack adequate central water systems and sewage disposal facilities.

Poverty is not unique to rural America. But its incidence is nearly twice as great there as in urban America.

In the past 25 years alone, the opportunity gap has caused nearly 20 million people to move from country to city.

This has been, and is, bad for rural America. It is becoming increasingly bad for *all* of America.

For it is not only the bright, able youngsters capable of assuming constructive roles in the cities who move there. It is also the poorly equipped and the victims of discrimination, many of whom end up among the city's problems.

Rural America cannot afford to export so many of its trained and educated youth. These are the young people who could provide the vitality and leadership to move our rural communities ahead more rapidly.

Urban America cannot afford to accept so many of the untrained, unskilled, and disadvantaged. These are the people who in a very short time find themselves worse off than before: Unemployed, in unfamiliar surroundings, and trapped in a web of utter despair.

The movement of rural poverty to the city must be stopped—in the interests of rural and urban America alike.

What are we to do about it?

We must raise the quality of life in the countryside. Only then will this forced migration be halted.

We must take steps to achieve parity of income for the American family farm.

But the problems of rural America cannot be solved by improvements in agriculture alone. We must broaden the economic base of rural America, so that people can get jobs and enjoy dimensions in living equal to those of urban America. We must work for the dispersion of industry, commerce, and people into rural areas where families can marvel at a sunset unclouded by smog and know that clean water is to be found at other places than a faucet.

We must produce better schools, improved hospital and medical facilities, adequate water and sewage services and a broader range of recreational facilities throughout rural America.

Only in this way will rural America become a place to move to—rather than to move from.

Though a stronger agriculture alone cannot completely revitalize rural America, rural America can never be completely revitalized without a strengthening of our family farms.

We have already pointed to the upswing in the income and prosperity of American farmers during the past 5 years. It is sometimes erroneously thought, however, that agriculture's progress is being made at the expense of the family farm system; that family farms are being absorbed by corporation or "factory" farms. Actually there are now more farms in the adequate family farm classification—more farms with human and physical resources matched to modern technology, modern market demands, and earning opportunities—than there were 5 years ago.

Farms that sold $10,000 worth or more of commodities rose from 20 percent of all farms in 1959 to 31 percent in 1965. On the other hand, commercial farms that sold less than $5,000 worth of products per year declined from 26 percent of all farms in 1959 to 14 percent in 1965.

True, our farms are larger and earned bigger gross income than in earlier periods; but they are still family farms. A 440-acre cotton farm in the Texas High Plains, a 600-acre cotton farm in Fresno County, Calif., or a 1,500 head beef-fattening enterprise in Colorado—all these are managed and operated as family farms. They are able to take advantage of the economies related to larger production without losing the benefits of family operation.

This is not to say, however, that we no longer have many farms with resources and operations too small to provide parity of income. An enormously important part of our rural development effort consists of programs and training aimed at developing these into fully adequate family farms.

### The Role of Supervised Credit

The supervised credit provided by our Farmers Home Administration is an extremely effective instrument in giving low income, underemployed farmers the lift they need. FHA not only provides credit for those who are unable to borrow from commercial sources; it helps its borrowers make and carry out annual and long-term development plans. County supervisors study and review the entire farming operation of individual borrowers, not only the production aspects but marketing, farm, and household expenditures, provisions for loan repayment, and other details that make the difference between success and failure.

Over 86,000 farm families who might otherwise have been driven by economic pressures from their farms to the cities availed themselves of our FHA farm ownership loan program during calendar 1965 to strengthen their economic position.

More than 15,000 families borrowed $238 million to buy, enlarge, or develop farms, or to refinance debts. Over 71,000 fami-

lies continued to use farm ownership credit obtained in previous years.

This credit stimulates the local economy not only because it is spent locally, but because the primary source of farm ownership credit is from small town banks and other private sources with the loans insured by Farmers Home Administration.

More family farmers than ever before, 114,000 in all, took advantage of FHA operating credit in 1965. We made about 75,000 operating loans, totaling $312,271,386, more than half of them to tenant farmers. In addition, 39,000 farm families used credit advanced in previous years.

About 7 out of 10 of the new borrowers used this operating credit to buy or refinance machinery or other capital items.

### Helping Farmers Work Together

Several USDA agencies actively aid farmers in combining resources to raise income and standards of living.

Under our grazing association loan program an incorporated group of family farmers and ranchers can buy additional land resources with Farmers Home Administration credit and operate the land cooperatively.

During calendar year 1965 we made such loans to 896 family farmers and ranchers in 37 associations. They borrowed $18,008,380 to acquire control of 676,806 acres of land, most of it in the western Great Plains area.

> In March, 35 small family livestock ranchers in western South Dakota bought more than 52,000 additional acres of grazing land, previously owned by a big Chicago grain company, with an FHA insured loan for $990,000. Singly, none of the members of the Ludlow Cooperative Grazing Association could have bought the ranch. Together, each of them has a more efficient and profitable operation. An intensive conservation program is being developed to improve the land and increase its value and productivity. The community has a larger tax base, the ranchers have greater purchasing power. The money was loaned by the Common School Permanent Fund of the State of South Dakota and insured by Farmers Home Administration.

Since 1961, 24,000 family farmers have acquired control of 5.7 million acres through the farm ownership and grazing association programs. This activity has tripled since 1960.

Extension agents working with a rural area development committee in DeSoto County, Miss., some years ago helped a group of small low-income farmers form the cooperative Southhaven Farmers' Market. Encouraged by expanding sales and growing membership, the 110 members of the co-op built a new sales center in the spring of 1965. This is the first farmers-to-consumers market financed with FHA credit under the Economic Opportunity Act.

The new market, located near a bustling housing development south of Memphis, Tenn., provides a ready all-weather sales outlet. Farmers have increased incomes, and consumers welcome their high quality, lower priced fruits and vegetables. Business is exceeding the members' most optimistic expectations.

A special Agricultural Conservation Program project in Rio Arriba County, N.M., (part of the Northern Rio Grande Resource and Development Project) has enabled 150 low-income, minority-group farm families to rehabilitate an obsolete community irrigation system as a first step toward improving family living and income.

The Santa Cruz-El Llano ditch is owned by these 150 families (mostly of Spanish-American descent) who live and farm along its banks. The farms are small, totaling only about 800 acres in all. The irrigation ditch system serving the community was primitive and inefficient, and engineers estimated that as much as 50 percent of its water was lost due to seepage, siltation, weeds, and trees. The water input at the head of the ditch did not always assure farmers at the other end enough water for their crops. The Rio Arriba County farmers pooled their ACP cost-shares and applied them to a single comprehensive project. This enabled them to construct diversions, division boxes, siphons and flumes, and put concrete lining in dirt ditches, thus saving scarce water and assuring an adequate water supply along the entire length of the ditch. Crops including chili peppers, many kinds of fruits and vegetables, and some pasture and hay for livestock will now bring increased returns.

### The New "Crop"—Recreation

On over 2,700 farms, recreation is now the primary source of income. In total we have helped about 31,000 landowners develop recreation as a "crop" by putting in one or more income-producing recreation enterprises.

During calendar year 1965, approximately 5,100 conservation district cooperators included one or more outdoor recreation enterprises in their conservation plans and 670 converted to recreation as their major source of income.

Fifteen hundred families, comprising about 7,500 people, with all kinds of tents and trailers camped on 150 acres of former cropland, more than doubled the population of the town of Belchertown, Mass., for 3 days in May 1965.

The New England Family Camping Association held its annual safari at the Robin Farm of Henry Renouf, a long-time cooperator with the Hampshire Conservation District. In 1962, Renouf converted 90 acres of his dairy and poultry farm to recreation. He built a lodge and improved 90 campsites. Last year Renouf converted his whole farm to recreation.

He has installed several small ponds, leveled an area for a baseball field, built an 80-by-50-foot pavilion for dancing, constructed a country store, installed many feet of sewer and water lines, and improved woodlands for campsites. Future plans call for nature walks, wildlife plantings, more ponds—including one of 28 acres—and an enlargement of the camping area.

Since 1962, we have operated an increasingly popular recreation loan program.

FHA advanced $1,125,620 to 174 individual farm families in calendar year 1965 to finance such farm-based enterprises as riding stables, picnic and campsites, game and fishing preserves. A survey of 83 borrowers showed an average gain of $1,500 in net income during the first season of operation.

We are studying the demand, opportunities, and problems involved in this type of enterprise. As might be expected the length of stay and composition of the party govern the services desired. Most swimmers, for example, will travel less than 5 miles. In contrast, campers on an overnight or weekend trip travel an average of 124 miles. While opportunities for successful farm-based recreational enterprises are greatest near centers of population, farm developers who provide recreational complexes with several activities available to family members can attract customers from considerable distances.

Our studies of 254 recreational enterprises in 6 areas showed that three-fifths of the enterprises returned earnings to the operator, family labor, and management after paying 5 percent on capital and investment. Most of the businesses, however, returned less than $10 per day to the operator and family labor.

### Researching New Sources of Income

In collaboration with the States, our Cooperative Research Service and other USDA research agencies are intensifying their studies of new opportunities for small farmers. New research activities generated during the year included a regional study directed at human resource development and mobility in the rural South, a basic study concerned with human and natural resource development potentials in the Appalachian region, and a study of community adjustments to social changes in the North Central region.

In Appalachia research has pointed the way to an additional source of income from fenceposts, from black locust trees used in reforestation. In the Ozarks we have demonstrated how hardwood brushland can be converted into productive pastures, while in the Great Plains research has indicated the best methods of seeding abandoned cropland.

For livestock owners, our scientists have developed an improved test for mastitis in dairy cattle, management methods to overcome "summer slump" in milk production, and more accurate ways of evaluating beef bulls as prospective herd sires.

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These programs are not cure-alls. But supervised credit, cooperative effort and assistance in new income ventures are helping many thousands of disadvantaged and "boxed-in" farm families to improve their livelihoods and their levels of living.

## EXPANDING RURAL HORIZONS

Although agriculture is still the economic foundation of rural America, local communities must seek new and expanded industries to provide jobs for the millions of rural unemployed and underemployed.

The need for off-the-farm rural jobs is rapidly growing for two reasons: (1) The continuing sweep of agricultural technology reduces the number of people who can make a good living out

of farming; (2) in the absence of more jobs there is no place for the increasing rural population to go but to the cities, which in effect merely transfers poverty from rural to urban America.

> Present agricultural lands in the Missouri Ozarks, for example, are capable of supporting 15,200 farm operators with a net income of $3,000 or more. But in 1959 the region had 24,514 actual farms.
>
> Besides farming, the Ozarks biggest income producing industry is recreation. In 1960 the recreational industry in this area supported the equivalent of about 21,000 full-time jobs. One and one-half times as many additional people were employed in services and retail trades serving the recreational industry. Looking ahead, it is estimated that recreation might provide something over 6,000 additional jobs by 1975.
>
> This, however, would take up only two-thirds of the slack—the 9,000 "excess" farms existing in 1959. Clearly there must be an expansion in other off-the-farm employment opportunities if this area is to provide an adequate living for its people.

This illustrates the fundamental problem rural America faces. Fortunately, it is being attacked with increasing intensity and effectiveness.

### Creating New Jobs

Since 1961 roughly 103,000 community leaders have organized themselves into about 2,200 active county rural areas development committees, 200 multi-county organizations, and 44 State Rural Areas Development groups to create new jobs and improve rural living. About two-thirds of these county committees have developed long-range plans to guide local progress.

They have organized and promoted about 18,000 projects, ranging from industrial parks, which bring thousands of new jobs to a community, to building community centers, health facilities, and other public services most Americans take for granted.

Over 13,000 projects have been completed, about one-third of them in 1965. While the number of jobs created directly and indirectly through projects completed and underway is difficult to determine, it is estimated that the total probably exceeds a half million.

### REA's Contribution

REA electric and telephone borrowers are exerting special efforts to stimulate economic progress in their communities.

Between January 1964 and July 1965, these borrowers helped launch 522 commercial, industrial, and community facility projects, resulting in an estimated 48,000 direct and indirect jobs. Among the projects were 126 public facilities such as water and waste disposal systems, airports, hospitals, and roadways, all bringing badly needed services to rural people as well as paving the way for new industrial developments.

Eighty-three percent of the investments in these projects, totaling nearly $316 million, came from State and local resources, with only 17 percent from Federal sources.

We estimate that upwards of 30,000 rural youth had summer jobs in 1965 due to Neighborhood Youth Corps projects sponsored by rural electric cooperatives, State forestry agencies, local soil and water conservation districts, and county Extension Service offices. These projects, carried out under the Economic Opportunity Act, enabled young people 16 through 21 to earn money to complete their education while gaining work experience in jobs beneficial to their communities.

Caddo Electric Cooperative, Binger, Okla., served as sponsor and fiscal agent for a Neighborhood Youth Corps project employing 1,200 youths in an 11-county area in West Central Oklahoma. About 60 schools participated. The particular aim was to enable disadvantaged youths to continue their education by giving them jobs in renovating school libraries and auditoriums, repairing books, and other useful occupations. For many of the youth, the project provided not only their first job but their first bank account. The project is employing 2,079 young people from 101 schools in 15 counties during the 1965–66 school year.

Approximately 5,500 youths worked during the summer on State forestry projects under the NYC. Considerably increased participation is expected in the future.

Soil and water conservation projects provided local job training and income for another 1,200 boys and girls. SCS gave technical direction to projects planned, sponsored, and operated by State and local soil and water conservation commissions and districts taking advantage of the Economic Opportunity Act.

Over 800 boys, enrolled in local Neighborhood Youth Corps in 23 States, worked on survey crews, flood damage repair and recreation projects, and as aides to professional personnel. More than 200 girls worked for conservation districts as clerks and typists. In addition, a work-study program provided conservation experience for students in 6 States who needed jobs to pursue their studies.

Some 2,800 youth worked on NYC projects in county extension offices. Extension Service in 28 States employed 516 college students under the College Work-Study Program to help expand 4-H program efforts with youth from low-income families. In New Mexico where special attention was given tc 4-H Club expansion, college work-study students in four counties reached 220 young people not otherwise involved in 4-H Club programs —three-fourths of them from low-income families.

In addition to NYC and Work-Study projects, we helped young people find jobs in other ways.

Forty-five Job Corps Conservation Centers in 29 States were activated on National forests with a total capacity of 7,442 corpsmen. More Centers are being constructed and others are in the planning stage.

One hundred and eighteen REA-financed electric and telephone borrowers gave summer jobs to 495 young Americans in 1965. These boys and girls filled jobs as clerks, receptionists, ground maintenance workers, and stock boys.

### Economic Opportunity Loan Program

The Economic Opportunity Loan Program, which got underway in January 1965 had immediate impact, helped improve income and living standards for about 106,000 low-income rural people in 1965. Farmers Home Administration advanced $30.8 million through 18,000 EO loans to individuals, and another $3.5 million through 261 EO loans to cooperative associations.

> Sam Newton of Tomahawk, N. C., the 10,000th recipient of an EO loan was typical. He was netting about $2,000 a year as a woodcutter to support his family of seven. Sam got an $1,800 EO loan to buy a chain saw and a used truck heavy enough to haul pulpwood logs. In 1966, he expects to net $3,500 and he will employ two helpers. He will repay the loan at the rate of $20 a month.

### New Industries From Research

Our USDA industrial specialists offer a unique service to Federal, State, and local rural community development groups by evaluating opportunities for new or expanded plants for processing such products as fruits and vegetables, cereal grains, oilseeds, maple and sorghum syrup, pine gum, low-calorie cheese, dried cheese whey, animal fat derivatives, and leather.

During 1965 we brought this type of industrial research to 64 rural communities in 27 States.

> The Harlingen, Texas, case is an example. Facing an economic decline due to the closing of a nearby military base, community leaders sought to take up the slack by expanding agricultural processing. We helped existing plants adopt our ARS-developed method of drying by explosion-puffing to utilize carrots not suitable for the fresh market. We are also assisting in the development of more profitable ways of using cotton linters and citrus wastes.

We advised Indian groups in Montana, New Mexico, North Carolina, and Florida on the establishment of sewing centers using ARS processes for flame-retardant cottons and glutaraldehyde-tanned leathers. In cooperation with the Office of Economic Opportunity, we helped predominantly Negro communities improve methods and facilities for processing home-grown fruits, vegetables, poultry, and meats.

We assisted communities in all 12 States of the Appalachian Region to establish or improve processing plants, and we gave follow-up assistance on agricultural processing in Florida, Kentucky, Louisiana, Michigan, Montana, New Mexico, North Carolina, Oregon, Texas, and Washington.

Research, meanwhile, is contributing additional products and processes adaptable to rural industry.

> We have new processes for using turpentine derivatives in making synthetic rubber, for combining corn or wheat starch with wood pulp for paper boxes, for producing glue from cornstarch for the rapidly expanding Southern pine plywood industry, for using linseed oil in low temperature lubricants, and for making a new type of dehydrated alfalfa meal that fills the special needs of poultry and swine feeders.

Another new method developed with support of the Department of Commerce processes peaches too ripe for shipping into a

Poverty

Sam Newton topples a tree near his home.

delicious peach drink. The processing of coastal bermudagrass into meals and pellets, a new and growing industry in the Southeast, should benefit from new fertilization practices that help maintain uniform quality and chemical composition.

### The Role of Cooperatives

As we saw earlier, cooperatives are an effective instrument in helping farm families make advantageous use of their agricultural resources. Cooperatives are also economic stimulators for entire communities. They increase income, provide jobs, and often are a community's biggest industry.

Our Farmer Cooperative Service joined with other agencies in the Department in sponsoring and conducting four meetings during fiscal 1965 to explore and evaluate the possibilities for cooperative action among low-income groups. Over 500 farm leaders attended one such meeting in the South. Participants were shown how to start and manage a cooperative, how to identify the need for a forestry association, and how to use a rural credit union.

FCS also supervised several studies in western and midwestern universities to determine the potentials for developing cooperative livestock feedyards and slaughter plants in these areas, and another study to determine the prospects for providing management, marketing, and processing services for woodland owners in Appalachia.

## TOWARD PARITY OF LIVING

### Rural Housing

One house out of four in rural America needs major repairs. Of 17 million rural housing units in 1960, over a million were so dilapidated as to be almost falling apart. More than half the homes of rural families with incomes of less than $2,000 lacked both a flush toilet and piped hot water, compared with less than 1 in 10 of the families in the same income class living in the urban fringe.

One of our principal instruments for improving shelter for rural people, farm and nonfarm alike, is our FHA housing program.

During calendar year 1965, more than 19,000 low-income rural families used over $153 million of FHA credit for improved housing facilities. This included $10,709,000 for improved housing for individual senior citizens and $2,400,000 for construction of rental units for senior citizens in rural areas.

Six underprivileged, low-income rural families in New Jersey are looking forward to living in comfortable modern homes as a result of a year-long FHA experiment in self-help housing. The homes are worth between $10,000 to $11,500 each, but are being built for $6,500. FHA provided the loans and furnished an experienced contractor-builder. The families supplied a large part of the labor. Other costs were re-

duced by group buying of materials. Payments on the loan will be $39 a month. With taxes and insurance, the total monthly payments are only $69.

Through a $529,810 FHA loan, some 80 low-income migratory farm labor families will soon be accommodated in new, modern, two-bedroom housing units at the Farm Labor Center of Indio, Calif. Eleven one-story buildings containing 80 apartments and 2 central laundry rooms will replace 79 substandard, unrepairable units that used to serve the seasonal workers in the Indio and Coachella Valleys. The project is located near schools, shopping, and medical care facilities.

Since January 1961, through the credit services of USDA alone, about 75,000 rural families have invested almost $673 million in new or improved homes. Payments of principal and interest are ahead of their due dates. Losses are less than two one-hundredths of 1 percent of the total loaned.

The Housing Act of 1965 will more than double the size of the rural housing program. In 1966 we expect to make insured housing loans totaling $286 million to 33,000 families. Loans for senior citizen housing and home improvements will amount to $30 million and will help 4,500 families. Another $12 million will go into labor housing loans and grants benefiting 2,000 farmworker families.

### Improved Water Supplies

To supply with modern water systems the 30,000 small rural communities without good running water seems at first glance a task of staggering proportions. But before REA less than 10 percent of our farms were electrified. Today after 30 years of the program more than 98 percent are served by central electric power. We can do as much with community water programs, and do it faster.

Five years ago, the Department made only 15 water loans to rural communities and the total was only $710,000. In calendar year 1965 alone, FHA advanced $67 million to 458 rural communities to construct water systems to serve 288,000 people.

In May 1965, I helped dedicate 9 new community water systems in Lawrence County, Tenn., to which the Farmers Home Administration had given loan assistance. When all these systems are completed, over 6,500 rural people—more than 80 percent—in that county will be served by pure, running water. Two years ago, at one of the area schools there was a severe outbreak of hepatitis. The old water sources, open wells, cisterns and springs often became polluted. Their new water systems are already spurring other signs of progress in these communities. FHA alone has financed construction of more than 300 new rural homes in the county. More than twice that many have been financed by other lending sources.

Since January 1961 we have helped over a half-million rural people get fresh, pure water running into their homes.

The enlarged program provided by Congress in 1965, increasing the maximum size of loans and including authority for sewage treatment facilities in communities of up to 5,500 (compared with 2,500 previously), will permit us to more than double our efforts.

The demand and need for this program is revealed by the backlog of loan applications from rural communities—more than 1,600 as of June 30, 1965, requesting loans for more than $240 million.

Water and other basic facilities generate a whole series of new community activities. New industry comes in and commerce swells, new homes are built, property values rise, and additional tax revenues help finance better schools, clinics, libraries, rest homes. And young people stay instead of going off to urban areas to live and work.

### Electricity and Telephones

Few forces have had as much impact on rural living—its convenience, communication, and commerce—as the spread of electric power and adequate telephone service. Altogether more than 20 million rural people—nearly two-fifths of our rural population and over one-tenth of our national population—are now served through REA-financed electric and telephone facilities.

REA's 1,000 active electric borrowers now serve 5.5 million farm and other rural consumer units. These borrowers operate on a sound business basis. Out of government loan advances totaling $4.9 billion, they had paid back almost $2.4 billion in interest and principal, including $275 million of principal paid ahead of schedule, by December 31, 1965.

Rural people on REA-financed lines are steadily replacing government capital invested in their systems with capital of their own. Today, the net worth of these systems is more than $1 billion.

During calendar year 1965, REA loaned $153.5 million for construction of distribution lines that will serve 132,848 new rural consumers and provide expanded facilities to meet the growing power requirements of existing consumers. In addition, the agency approved loans totaling $162.2 million for generation and transmission facilities to assure adequate supplies of power for distribution systems.

Despite the success of the REA-financed systems, rural people still pay more for power than people in the adjacent towns and cities. Our goal is to achieve parity of costs and services for rural people.

Working toward that goal, a record 188 electric systems (about 1 out of 5 REA borrowers) reduced rates in 1965. The saving to rural power users will be nearly $5.8 million annually.

These reductions were made despite low population density, low revenues per mile of line, lack of large power loads and chronic rural poverty. The REA-financed systems, for example, average only 3.5 consumers per mile of line, compared with about 33 for urban-based commercial utilities.

Besides lowering costs and improving services, we are continuing to push forward to reach rural people who still have to depend on wood stoves, oil lamps, and hand water pumps.

In Arkansas, the Carroll Electric Cooperative Corp., working with REA, began line construction to serve 194 families in the Ozark Mountains. These consumers live in areas remote from the main power lines following the highways.

The Navopache Electric Cooperative, Inc., of Lakeside, Ariz., began line construction to reach 15 or more rural consumers in the Mogollon area of New Mexico. Service was especially desired for such tourist attractions and economy-builders as a ghost town, an art gallery, and a museum of old relics.

With the accelerated development of recreational, commercial, and industrial enterprise in rural areas, improved telephone service has rapidly assumed new importance. The 8-party service which farmers welcomed a dozen years ago to replace party lines serving up to 25 homes, is fast disappearing. About one-fourth of the subscribers on REA-financed systems now have one-party service and our goal is 52 percent by 1975.

Since the program began in 1949 REA has financed 845 telephone systems—620 of them commercial companies and 225 cooperatives—with loans totaling over $1.2 billion. They are bringing new or improved service to about 2.1 million farm and other rural subscribers. Four out of 5 farms now have telephones—compared to about one in three in 1949—and 95 percent of the service is dial.

During calendar year 1965 alone, REA made 149 telephone loans totaling $81,148,000. These loans—including 15 to new borrowers, 3 of them cooperatives—will provide new or improved service for 64,464 subscribers. Over 130 rural telephone exchanges went "dial" in 1965.

Our telephone borrowers, like the electric borrowers, are on a sound basis. By December 31, 1965, they had paid $206.8 million in interest and principal, including $10.6 million of principal paid ahead of schedule.

Our telephone borrowers, again like our electric borrowers, operate under exceptional difficulties. Telephone cooperatives financed by REA serve an average of only 2.4 subscribers per mile of line; REA-financed commercial systems 4.7 subscribers per mile. Both figures are far below the independent industry which averages 16.0 subscribers per mile. Companies of the Bell Telephone System, it is estimated, serve over 40 subscribers per mile of line.

But even though over half of our borrowers in 46 States serve fewer than 1,300 subscribers each, all of them render modern dial service.

We are driving ahead to put telephones into remote regions.

The Big Bend Telephone Company of Alpine, Texas, started construction to provide telephone service in a large isolated, mountainous area of Texas close to the Mexican border. Service will be brought to 679 subscribers, many of them ranchers, over 2,538 miles of line. The density, lowest in the history of the REA telephone program, will average one subscriber to about every 4 miles of line. The subscribers will have modern dial service on 1, 2, and 4-party lines, from automatic exchanges at Six Shooter, Calamity Creek, Alamito, Big Canyon, Heath Canyon, and the town of Langtry.

Despite the remarkable progress since 1949, the hardest jobs lie ahead. States like Alaska, Mississippi, and New Mexico—where nearly half the farms lack telephones—pose difficulties of low farm income, rugged terrain, sparse population. But the challenge will be met.

### Recreation

Among the countryside's greatest assets is one that urban Americans want more and more of—facilities for outdoor fun and relaxation. We have seen that a growing number of farmers are selling recreation. Communities can sell it, too; and they can use it also to attract new business, new families, to keep their young people, and to increase property values.

We help communities establish recreation facilities through credit, technical guidance, and cost-sharing.

In calendar year 1965, Farmers Home Administration loaned $9.9 million to 99 nonprofit rural community associations to finance outdoor family recreation projects.

> A $1.5 million recreation development in Putnam County, Mo., made possible by an $850,000 FHA insured loan will provide 100 full-time new jobs, add over a million dollars a year to the county's economy, and shift more than 1,500 acres of cropland out of production. We estimate that 100,000 people will use the recreation facilities of this rural county when they are completed. The 4,000-acre recreation complex will include a 1,500-acre lake with 40 miles of shoreline. More than 20 private firms have already signed 25 year leases to construct 52 recreation and business establishments in the area, among them motels, restaurants, a marina, and a variety of stores and shops.

Approximately 190 rural communities now have new outdoor recreation areas developed with loan assistance totaling $21 million.

Upstream watershed projects in 30 States now include 89 recreation developments. Upon completion they will provide recreation opportunities for 5 million people each year. Sixty more such recreation developments are in the planning stage for watershed projects.

The tempo of activity on the rural recreation front will rise sharply in 1966. We expect to assist 160 communities with loans and guidance in developing recreation facilities that will serve more than 100,000 people. And the new Cropland Adjustment Program will provide cost-sharing incentives for communities and farmers to open land for recreation uses.

## EDUCATION

Many problems of rural areas are associated with the educational deficiencies of rural people stemming in part from poor schools, inadequate teachers, generally low educational standards and high dropout rates in school.

High dropout rates in turn are closely associated with low parental levels of education, occupation, and income. Thus we find

a vicious circle: Poor education leading to poor income for parents, and this to a high percentage of dropouts among their children.

Recent studies at 8 State agricultural experiment stations in the South reveal that many low-income rural people feel that they cannot get ahead occupationally. They express frustration, hopelessness, helplessness, and utter resignation to their condition. This lack of motivation is being transferred to the younger generation.

We must improve communication with and instill ambition in these individuals and families. This is largely a job for education.

Closing the opportunity gap in education, as in all the other elements of modern community life, requires use of the full range of services and resources within the Federal Government. All Federal programs must reach out equitably into rural America—not stop at the city line.

To assure this "outreach" and thus to improve the education, social, health, and job development prospects in rural communities, we have established a Rural Community Development Service as a staff agency in the Department. Its function is to put together and expedite all of the varied forces and programs aimed at closing the rural opportunity gap. It has no operating responsibilities, only those of organizing and coordinating to assure that USDA facilities are mobilized to make full use of all Federal resources, including those outside the Department of Agriculture, in rural areas.

We have begun with the Department of Health, Education, and Welfare a number of "outreach" efforts designed to improve educational and health services in rural areas. They include a pilot program to focus concerted educational and vocational training services in three areas to determine how well the new educational and vocational training programs can be adapted to rural needs and how effective they are in upgrading educational levels and skills.

A nationwide effort has been launched to reach older rural Americans with facts and information about medicare and health insurance, one step toward upgrading health services in rural America.

> In Osceola County, Mich., more than 65 senior citizens responded enthusiastically to a day-long program during which Social Security officials explained their services and Extension specialists discussed "Nutrition for the Later Years" and "Living a Full Life During Later Maturity."

Currently, we are developing an "outreach" approach with HEW to help schools in low-income areas which do not have school lunch facilities to acquire them.

The county extension agent has long been a key figure in rural education. Extension agents devote about half of their time to helping farm people, about 30 percent to assisting rural nonfarm people, and the remainder to city residents. Much of the

"urban" service is for people in towns of less than 10,000 population.

About two-fifths of agents' time is devoted to people in the low-income bracket (less than $3,000 a year per family), mostly with rural residents.

We encourage local resource development groups to study local needs and to develop programs in human resource development.

> RAD committees in Wisconsin are using the Manpower Development and Training Act and training programs under the Economic Development Administration to successfully match jobless and underemployed workers' skills to newly-developed jobs. Eighty percent of the 3,635 trainees who had completed MDTA and EDA training programs by the end of December 1965 have been placed on jobs.
>
> More than 150 young homemakers in 4 low-income rural counties in Alabama were given substantial help by 8 extension program assistants. Teaching materials were developed and tested for people with limited reading ability. Basic sanitation, good nutrition, improved personal appearance, and home improvement were emphasized.
>
> Reports show that homemakers have cut grocery bills and families are eating better; houses have been fumigated; clothes have been repaired and renovated; better use is being made of donated foods, especially dried milk; simple home repairs have been made; yards have been cleaned; children kept in school; husbands enrolled in vocational training; general appearance of young homemakers and children improved in many instances.

Twenty State Extension Services helped develop VISTA projects and 13 of them are using VISTA volunteers to further their educational work with disadvantaged residents. Montana's Extension Service trained 44 VISTA volunteers for work on Indian reservations in 9 States.

### Youth Programs

We are heavily engaged in programs to develop youth (mostly rural, but urban, too) as productive members of society. We have already mentioned some of our Neighborhood Youth Corps activities. Roughly one-third of the work of the Extension Service is devoted to youth, mainly with the almost 2¼ million 4-H Club members and 380,000 adult volunteer leaders who help to carry out 4-H programs.

Training in 4-H has long since proved its worth in helping prepare boys and girls 9 through 19 years old not only for individual achievement but for leader roles in community improvement.

Today 4-H projects are giving special service to disadvantaged youth. These projects include a 4-H program for youth from migrant families, special camps in Missouri, North Carolina, and Iowa, and a mobile 4-H youth development center in Arkansas.

Our home economists are making intensive efforts to aid local groups initiate Head Start projects. These projects prepare underprivileged, preschool youngsters for school life, helping them get off to a good start. We gave special attention in 1965 to 344

of the lowest income counties in 21 States; 182 of these counties secured 239 Head Start projects to train almost 41,000 preschool youngsters. We trained both volunteers and paid staff to assist in these programs, and our home economists conducted companion educational programs in nutrition, child care, and home management for mothers of children in the program.

During the summer of 1964, in cooperation with the West Virginia University Center for Appalachian Studies and Development, we began a 5-year project to explore ways to help disadvantaged families. Several experimental programs were set up in the Charleston area.

> A preschool "experience center" in Putnam County's Vintroux community, caught the attention of Office of Economic Opportunity administrators.
>
> When Project Head Start was being developed, economic opportunity officials studied Extension's successful methods for providing preschool children new experiences in mental, physical, and social development—at the same time giving mothers instruction in homemaking skills and improved family living—and securing cooperation of the whole community in improvement programs.
>
> Men of the community repaired an abandoned house to serve as the "experience center." They built most of the play equipment and furnishings needed by the children. The women helped their husbands on the renovation project, and, after being trained by Extension workers, assisted in teaching the preschool youngsters. The "experience center" is also used by women and girls for Extension instruction in homemaking, as well as for a meeting place for the newly formed 4-H Club.

This work has just begun. The people of the community have much to learn. So do the Extension workers who are trying to help them. But from a small start they have come a long way.

There is no doubt in my mind that the Department can be a powerful catalyst to make parity of opportunity a reality everywhere in the countryside. All of the programs designed to support and encourage rural community development will be of little value, however, unless communities and the people living in them are educated to an awareness of the resources available and stimulated to use them. This is a task of education that our people have the experience, resources, and know-how to perform.

## COMPREHENSIVE RESOURCE DEVELOPMENT

If rural America is to attract an equitable share of the nation's industrial and business and service growth, it must improve and make wise multiple-use of its natural resources. In many parts of the United States this can be done only through area or region-wide resource development. Otherwise, individuals, groups, even communities, may fail to advance because they lack the basic foundation for sound economic expansion.

Two pilot operations—Rural Renewal, and Resource Conservation and Development—have been started to study and stimulate this type of area development.

### Rural Renewal Program

We have advanced $1,833,700 in loans to local development authorities in 5 rural renewal project areas. Technical assistance funds amounting to $101,000 have been advanced for planning and surveys to determine ways of developing industry.

> The Little River and Sevier Counties (Arkansas) projects show what can be done. We advanced $920,000 in FHA loans and provided a good bit of technical guidance which served as a catalyst, enabling the people of this region to assemble their manpower, land, water, and other resources for concerted economic progress. State, local and private resources came in on the projects. Private capital was invested, homes were built, farms improved, manufacturing enterprises started or expanded, a nursing home established, a forestry and recreation center started. About 175 permanent industrial jobs have been created, plus hundreds of temporary jobs. Family farm income from timber and vegetables has increased, and the recreation site including a lake now planned may attract as many as a million users annually.

Here is a concrete illustration of how the people of a community by working together for a simultaneous development of their multiple resources can begin to break out of the cycle of rural poverty and start a snowballing economic revival.

### Resource Conservation and Development Projects

These projects emphasize ways to enlarge economic opportunity through the conservation, development, and utilization of area resources.

Ten Resource Conservation and Development Projects were authorized for planning in 1964, 10 more in 1965, and others are planned for 1966. About 500 identifiable project measures are now underway as a result of community-wide planning efforts. The investment ratio is running $4.00 of local money to every dollar of Federal funds.

The projects include structures for flood prevention, water supply and management, and recreation; park development; area beautification; new processing and marketing outlets for low grade timber and other local products; conversion of cropland to other uses; speeding up of soil surveys and land conservation treatment; and such supporting measures as sewage systems for rural communities, scenic parkways, health services, and development of local arts and crafts.

### Service to Appalachia

Our Soil Conservation Service has intensified its technical assistance for soil and water resource development in rural areas of Appalachia.

Nineteen new watersheds were authorized for planning and 15 others approved for installation of land treatment and structural measures in the Appalachian region during calendar year 1965. We now have 39 projects in some stage of planning and 83 in operation. The total Federal cost of these 83 projects is estimated to be $98 million.

Fourteen sponsoring local organizations signed their first project agreements in 1965, signaling the start of actual construction in their projects. About $5.9 million was obligated in small watershed projects in Appalachia during fiscal 1965.

SCS also located the site for a new plant materials center to be built at Quicksand, Ky., to give special attention to revegetation problems in Appalachia. At the center and on nearby farms, SCS specialists will evaluate a wide variety of plants for use on the steep, shallow, acid soils of the region and to restore land left bare by mining operations to productive use for pasture, woodland, wildlife, or recreation.

### Conservation Districts Broaden Objectives

Since 1962 about 2,000, or two-thirds, of the nation's soil and water conservation districts have revised and updated their long-range programs to meet farm and rural America's expanding needs. They have signed new working agreements with us, extending their goals beyond erosion control and soil conservation, to include also the conservation and development of all related resources to serve all public interests.

More than 2 million landowners and operators are now cooperating with Soil and Water Conservation Districts, an increase of 150,000 since 1960.

### Multiple-Purpose Projects

Each year a larger percentage of small watershed projects combine other purposes with flood prevention. By the end of 1965 nearly half (346) of the projects approved for operations had such multiple-purpose objectives as recreation development, fish and wildlife habitat, and municipal water supply.

As we mentioned earlier 89 developments in 30 States may draw about 5 million recreation visits a year when completed. They will offer such basic facilities as boat docks and ramps, beaches, picnic tables, fireplaces, sanitary equipment, water, electric power, roads, trails, and parking lots.

One hundred fifteen towns with a combined population of 604,000 will obtain municipal water supply from 116 multiple-purpose reservoirs completed or planned in 89 separate projects. Thirty-six of the towns and cities are in the Northeast where drought resulted in widespread water shortages during the summer of 1965.

### Special Projects

A Special Projects Program carried out by Agricultural Stabilization and Conservation county and community committeemen provides cost-sharing aid for treating community-wide conservation problems.

The projects range from saving water in dry Western States, through flood control in humid areas, to helping low-income farmers make the best use of their lands.

The problem of Tishomingo, Okla., is illustrative. The people of Tishomingo have been accustomed to use the water of Pen-

nington Creek without running it through a filtration plant. Usually the water is clean. But after a heavy rain housewives now find it running muddy from their faucets.

An upstream dam is supposed to control the mud problem. But though it is a fairly new dam, replacing one closer to town that silted in several years ago, it isn't doing the job.

Tishomingo's problem is now being solved by a cooperative effort of the town, farmers in the watershed, the Johnston County Agricultural Stabilization and Conservation (ASC) Committee, and the Agricultural Conservation Program.

The ASC county committee began by studying aerial photos of the watershed. They found that 68 farms comprising 8,000 acres were suffering from uncontrolled erosion—the source of the mud in Pennington Creek.

The county committee organized an ACP Special Project to help these farmers provide erosion control dams and waterways, diversion terraces, and reshaped gullies that can be protected with cover crops.

It will take at least 3 years to complete the whole project, but when it is done the people of Tishomingo will be sure of a supply of clean water and the farmland will be in better shape for the future.

Over 100 such community conservation problems across the nation were dealt with through ACP Special Projects organized in 1965.

## BEAUTIFICATION

Rarely does a conservation practice fail, in some way, to add to the beauty of the countryside. Grass cover or trees replacing a bare eroded hillside, terracing, stripcropping to hold the soil, a farm pond in a water-short area: Through the years all have contributed to natural beauty.

In 1965, however, natural beauty received new emphasis as a reason for, not just a by-product of, soil and water conservation. This, too, is an integral part of the revitalization of rural America. Our Agricultural Conservation Program gave special attention to farmland beautification and a new beautification-conservation practice was made a part of the program for 1966.

In the State of Washington, the ACP cost-sharing of roadside timber improvement on private lands is resulting in substantial beautification benefits in four counties. This effort began in Ferry County and has now spread to three adjoining counties—Spokane, Stevens, and Pend Orelle.

The government pays 70 percent of the cost of this roadside improvement. The work is restricted to 200 feet from public road right-of-way, resulting in the enhancement of scenic values for travelers and local people. Involved in the effort are the ASC county committees and office managers and area forestry technicians.

A grassy oasis was created by a Cochise County rancher, unhappy with a worthless brushy area on his land along State Highway 90 between Bisbee and Sierra Vista in Arizona. With ACP help, he cleared and reseeded more than 500 acres—part of

which was an old city dump. He has eliminated a longstanding eyesore and tripled the livestock carrying capacity of his land.

The Soil Conservation Service offered land users and public planning agencies technical assistance in establishing conservation practices with natural beauty and landscaping values, especially on small odd plots, field borders, bogs, marshes, pond and stream margins, and wild areas. Using adaptable plant materials which contribute to natural beauty wherever practicable SCS encouraged cooperators to incorporate into their conservation plans provisions for roadside improvement, farm road beautification, and the harmony of farmsteads with their natural settings.

We are stressing the finding and propagating of new plants with attractive flowers, fruits, or foliage and with special values to wildlife and recreation areas, in addition to their usefulness for soil protection and forage production.

SCS has established a new plant materials center in Kentucky to develop plants to vegetate strip-mined areas and another on Cape May, N.J., to deal with problems of coastal dune stabilization.

> A power company cooperating with the Muskingum Soil and Water Conservation District in Ohio has revegetated 3,500 acres of strip mine spoil banks. Following SCS technical advice, the company planted a mixture of black locust; soft hardwoods, such as tulip-poplar, sycamore, wild cherry, sweet-gum, and red maple; and climax hardwoods, such as oaks and sugar maple.
>
> We expect a swift response from the area's wildlife. A check of the birdlife of the area revealed 78 individuals of 19 species along a half-mile transect in a 3- to 5-year-old reclaimed area and 158 individuals of 33 species in an 18-year-old area.
>
> The company expects to replant the spoil banks created in each year's mining operations.

Several States now employ agronomists and erosion-control specialists to plan roadside stabilization as a part of current construction. SCS provides technical consultation assistance upon request.

> When improvements on U.S. Highway 321 in Orangeburg County, S. C., were planned, we recommended seeding Pensacola bahiagrass on the shoulders to stop soil from eroding away from pavement edges.
>
> The experiment was successful. Bahiagrass seed was harvested from that section of the highway for use on other roads in the area. Similar work is now going on in the 7 highway districts of the State, and county commissioners are adding such improvements to the roads under their supervision.

Both SCS and Extension Service aided adult citizen groups in community beautification campaigns.

The Renville County Soil Conservation District in North Dakota enlisted the cooperation of the county's cities, churches, schools, and clubs in a program of landscape beautification and community improvement. Here are some of the results.

The Mohall Country Club planted a windbreak along the windward side of its golf course, numerous single-row windbreaks along the fairways, and a wildlife area.

In a joint endeavor the Mohall City Planning Commission, the local Future Farmers of America chapter, and the conservation district planted trees to screen the city dump ground from the highway.

The towns of Sherwood and Tolley planted windbreaks and wildlife areas. Glenburn is planning a city park and wildlife planting based on the SCS soil survey.

Many schools and churches have planted protective tree belts.

Extension provided educational assistance on litterbug campaigns, junkyard screening or removal, community beautification contests, rest-stop establishment and beautification along highways, tree and shrub plantings and many other activities.

The Georgia Cooperative Extension Service and its co-sponsoring State agency, the Department of Industry and Trade, enlisted the active participation of over 135,000 individuals and 2,300 organizations and clubs in "Make Georgia Beautiful Week" in January 1965.

Their beautification accomplishments far exceeded their goals: more than 414,000 dogwood trees were planted (the goal was 300,000), 94,000 other ornamental trees were set out (an unexpected, but pleasant, side effect), and 362 truckloads of litter were picked up from 937 miles of streets and highways.

State officials credited much of the success of the drive to county extension agents, who held organizational meetings, helped pool orders for trees, and supplied how-to-do-it information to thousands of volunteer workers.

An expanded month-long effort is planned for 1966.

The drive for natural beauty is a great challenge also to forestry. USDA's Forest Service has issued a 76-page publication, *The American Outdoors—Management for Beauty and Use,* and distributed it widely to community and conservation leaders as a practical guide to making all our forests beautiful and useful.

In keeping with the campaign to beautify America, about two-thirds of the route mileage built by REA telephone borrowers was placed underground in 1965. It is now less expensive, on the average, to bury telephone wire and cable than to construct conventional overhead lines. The landscape is free of unsightly wires, and the lines themselves are protected from bad weather and are not a hazard for low-flying aircraft.

So far it is proving more difficult and more costly to bury electric lines. However, one-third of REA's electric borrowers already have some buried lines, mostly to commercial firms and in new rural housing developments.

### "Youth for Natural Beauty"

Our Extension Service is giving leadership to the nationwide "Youth for Natural Beauty" program involving 4–H, Scouts, Campfire Girls, and other major youth organizations. With Luci Johnson as honorary chairman, this program was launched following the White House Conference on Natural Beauty. 4–H

Clubs in 47 States signed up to take part in the full 4–H Community Beautification program and 4–H'ers worked on roadside beautification, town and country clean-up campaigns, and home and community beautification projects.

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Rural America holds vast, untapped opportunities for people. Its economic potential is unlimited. Its capacity for social good and for relieving the malaise of our cities and their expanding ghettos presents to us the greatest domestic challenge of this century.

Rural America has growing numbers of adequate family farms—a guarantee of continuing food and fiber abundance. They constitute a solid and continuing economic base for rural communities in the days ahead.

Rural America has room for outdoor recreation, not only for its own people, but for city neighbors. It has trees and grass, and freshly-developed lakes and reservoirs. We are only now beginning to realize the economic implications of the skyrocketing demand for outdoor recreation.

Rural America has values nowhere else to be found in this nation. As they are discovered and used, rebirth is sure to follow.

Perhaps best of all, Rural America has time, and space, in which to plan the type of environment in which its growth can best unfold.

## SERVING ALL CONSUMERS

Most consumers are still unfamiliar with the scope of the Department's services to them. Generally speaking, the USDA is still identified in the public mind as an agency which helps farmers grow two blades of grass where only one grew before.

This identification is as out-of-date as horse and buggy transportation.

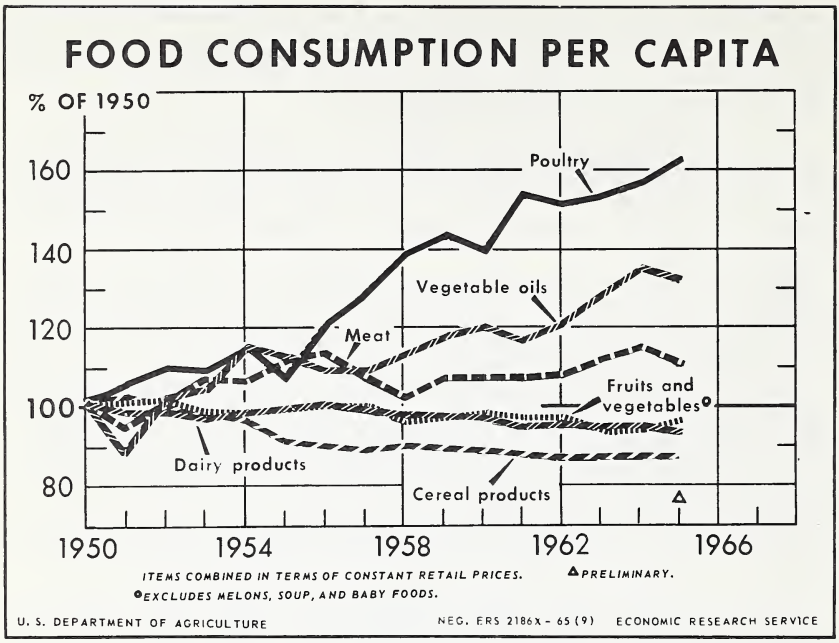
The Department of Agriculture provides more direct services for more consumers than any other department or agency of Federal Government. Two of every three dollars it spends go for services of primary benefit not to farmers as such, but rather to the general public.

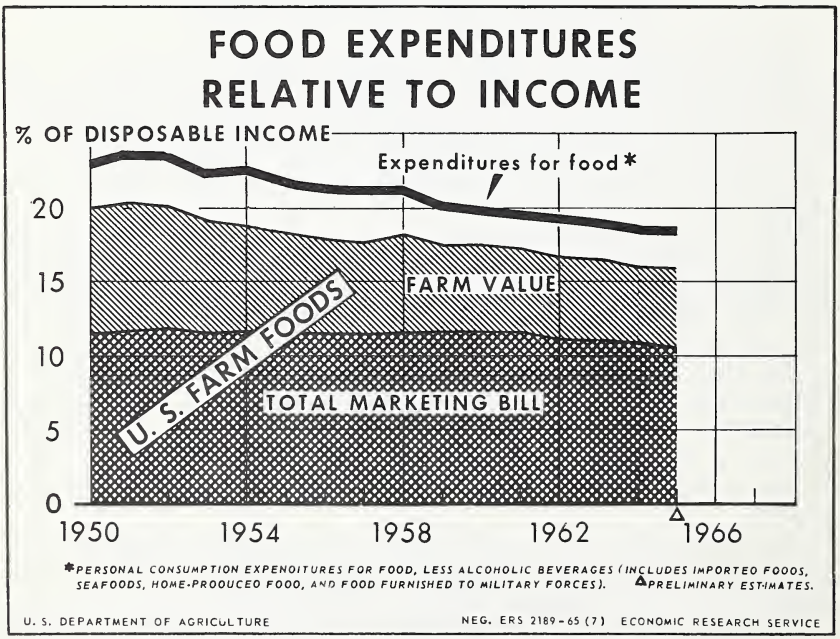
The first and greatest of these services of course is USDA's cooperation with agriculture and the food industry in achieving abundance.

Food is the Nation's biggest bargain. Our people work fewer hours to buy more of better quality foods than ever before in history.

Food expenditures in 1965 took only 18.2 percent of average family spendable income. In 1960 food took a bite of 20 percent, in 1950 over 22 percent, in 1890 about 40 percent.

To buy a loaf of bread requires from 2 to 4 times as much work in other countries as it does in the United States—5 min-


FOOD CONSUMPTION PER CAPITA
% OF 1950
160
140
120
100
80
Poultry
Vegetable oils
Meat
Fruits and vegetables°
Dairy products
Cereal products
1950
1954
1958
1962
1966
ITEMS COMBINED IN TERMS OF CONSTANT RETAIL PRICES.
△PRELIMINARY.
°EXCLUDES MELONS, SOUP, AND BABY FOODS.
U. S. DEPARTMENT OF AGRICULTURE
NEG. ERS 2186X - 65 (9) ECONOMIC RESEARCH SERVICE


FOOD EXPENDITURES
RELATIVE TO INCOME
% OF DISPOSABLE INCOME
Expenditures for food*
20
15
10
5
0
FARM VALUE
U. S. FARM FOODS
TOTAL MARKETING BILL
1950
1954
1958
1962
1966
*PERSONAL CONSUMPTION EXPENDITURES FOR FOOD, LESS ALCOHOLIC BEVERAGES (INCLUDES IMPORTED FOODS, SEAFOODS, HOME-PRODUCED FOOD, AND FOOD FURNISHED TO MILITARY FORCES). △PRELIMINARY ESTIMATES.
U. S. DEPARTMENT OF AGRICULTURE
NEG. ERS 2189-65 (7) ECONOMIC RESEARCH SERVICE

utes here as compared with 20 in Austria, 12 in France, 13 in West Germany, and 16 minutes in Italy.

To buy a pound of beef sirloin takes 30 minutes of work here, 133 in Austria, 155 in France, 63 in West Germany, and 169 minutes in Italy.

A Russian works 8 times as long as an American worker to buy a dozen eggs, 9 times as long for a pound of butter, and 21 times as long for a pound of sugar.

## SHARING FOOD ABUNDANCE

Though the average American is better fed today than at any time in the past, and his available food supply dwarfs that of the average citizen of any other nation, many millions of our people still have too little income to buy the food they need for a fully adequate diet. In a Nation where surpluses abound, this is deplorable.

We are waging war on malnutrition through a battery of food distribution programs administered by the Consumer and Marketing Service. Forty million Americans—more than ever before—have better diets because of these programs.

### School Lunch

More than 17 million children ate a nourishing lunch each school day in the 1965 school year, and nearly 2 million of these ate free or for less than the already low school lunch price. Among these latter were 170,000 children in "pockets of need" in 1,200 schools of 23 States who were fed with the help of special USDA cash and food donations, borrowed or donated equipment, and volunteer labor.

Altogether, about one-third of all pupils in elementary and secondary schools took part in the National School Lunch Program. Compared with the past, this is good. Viewed against the need and the overflowing food abundance of our land, however, it leaves much to be desired.

Why should any child in this country have to go hungry? Yet many schools where the proportion of needy children is large lack funds to begin and maintain a lunch program even with normal Federal and State assistance.

We have made some progress in attacking this problem. More should be possible in fiscal 1966 with the aid of the Elementary and Secondary Education Act, through which schools may get funds to build kitchens and lunchrooms, and with the help of an appropriation for special assistance under the School Lunch Act.

### Special Milk

Nineteen out of every 20 U.S. school children had available low cost or free milk at school through the School Lunch or Special Milk Programs in fiscal year 1965. This latter program operated in 92,000 schools, child-care centers, summer camps, or-

Lunch time: For some of these children, the best meal of the day.

Food Stamp Program provides more and better food.

phanages, and similar institutions. Milk was also provided to 12,500 Head Start Centers. The 3 billion half-pints of milk served at reduced prices through this program, plus another 2.9 billion half-pints served with lunches under the School Lunch Program, represented more than 5 percent of all the fluid milk marketed in the United States during the year. Besides improving nutrition for children, these programs are expanding markets for American farm products.

### Food Stamp

> In Arkansas, a school teacher visited the home of an 11-year-old boy to discuss with his mother a marked improvement in the boy's attitude and learning ability. There was only one change in the home, the mother said—more and better food through the Food Stamp Program. The whole family now has enough to eat.

Many similar incidents have been reported to the USDA by parents and children, teachers, visiting nurses, and physicians attesting that the Food Stamp Program often has a remarkable effect on health and vigor.

Placed on a permanent basis by Act of Congress in August 1964, the Food Stamp Program was extended during calendar year 1965 from its pilot status (43 areas in 22 States) to 191 areas in 36 States and the District of Columbia. At its year-end peak the program aided about 800,000 people. For roughly $6 out of their own money, they could get $10 worth of food stamp coupons enabling them to buy more and better food at their local stores. Operating through regular channels of trade, the program aids low-income families and, by expanding the total market for food, also stimulates business activity.

During 1966, we expect to expand the program greatly, making it available to 1.3 million persons.

### Food Donations

Millions of Americans, besides those using food stamps, are helped to better nutrition through USDA food donations. The donated foods are acquired in price support and surplus removal programs—a wide variety, including beans, canned beef, bulgur, butter, cheese, corn grits, cornmeal, dried eggs, flour, lard, margarine, chopped meat, nonfat dry milk, peanut butter, peas, rice, and rolled wheat.

Low-income families in 1,667 counties and 259 cities received these foods during a peak period in fiscal 1965—more communities than had ever before participated.

Food is also donated to charitable institutions, schools, summer camps for children, Head Start Centers, and relief agencies feeding victims of natural disasters. When people are driven from their homes, as many thousands were in October 1964 and September 1965 by hurricanes Hilda and Betsy, USDA-donated foods stored in schools and warehouses for use in various food programs are immediately made available.

### Plentiful Foods

Housewives regularly consult the food pages of their newspapers or listen to radio or television to find out what foods are a "good buy." For much of this information they are indebted to our "Plentiful Foods Program."

Each month, after our commodity specialists have collected all available facts about present and near future supplies of various foods, we publish a list of foods expected to be especially plentiful in coming weeks. The list is widely disseminated through the cooperative efforts of the food industry and the news media.

Such information helps low-income families stretch their food dollars; it alerts all consumers to foods that are seasonally plentiful and usually at their best in quality; and it aids farmers and the food trade by stimulating sales of foods that are especially abundant, often averting serious price breaks.

Special Plentiful Foods campaigns were conducted during fiscal year 1965 for apples, eggs, beef, milk and dairy products, prunes, red tart cherries, and bread and other grain products.

## OTHER FOOD SERVICES

The people of the United States have the safest, cleanest, best quality food in the world—largely because of USDA inspection and grading programs.

### Meat and Poultry Inspection

No Government program touches more people every day than our meat and poultry inspection services. All meat and poultry products shipped across State lines must carry the U.S. inspection mark of approval.

This means that 85 percent of the meat and 86 percent of the poultry sold commercially in the United States during fiscal 1965 passed Federal inspection.

Our inspectors examined more than 60 billion pounds of poultry and meat products in fiscal 1965, and supervised sanitation and handling practices in the plants where these products were prepared. Meat inspection services were carried out in 1,775 meatpacking plants—about 100 more than in 1964.

Labels on processed meat and poultry products must also meet USDA approval for accuracy, adequacy, and truthfulness. We reviewed more than 68,300 new and revised labels during the fiscal year, and returned about 5,500 for modifications so that consumers would not be misled.

The growing popularity of convenience foods is reflected in increased inspection of cut-up poultry and processed poultry products. We inspected nearly 16 percent more cut-up poultry than in 1964 and 12.5 percent more processed poultry products.

### U. S. Grades

USDA food grades serve consumers as *guides* to *good shopping*. The "USDA Choice" on a piece of meat; the "U.S. Grade

A" on eggs, poultry, butter, and canned and frozen fruits and vegetables; the "U.S. Fancy" on a bag of apples—all these help consumers select the quality of foods they want.

We continued our efforts in 1965 to help more consumers understand and use the U.S. grades for food. During the fiscal year we graded 10 percent more beef, 7 percent more poultry and eggs, 25 percent more canned fruits and vegetables, and a half-billion more pounds of frozen fruits and vegetables than in 1964.

The almost 12 billion pounds of meat and meat products officially graded included 57 percent of the total beef slaughter and half of the total lamb slaughter. Among other foods graded were 5.2 billion pounds of poultry, more than 14 billion eggs, over 22 million pounds of egg products, 3.4 billion pounds of frozen fruits and vegetables, 225 million cases of canned fruits and vegetables, 1-⅓ million carlots of fresh fruits and vegetables, and 4.1 billion pounds of butter, cheese, and nonfat dry milk. About 17 percent of the total U.S. creamery butter production carried the U.S. grade shield on the carton.

Most grain sold off farms (totaling almost 7 billion bushels) was inspected and graded under the mandatory U.S. Grain Standards Act; about 66 million 100-pound bags of rice were inspected; and nearly 19 million samples of cotton were classed, representing 95 percent of total ginnings. Micronaire readings were made on nearly 10 million samples. This service, which determines the fineness of cotton fibers, was offered on a fee basis.

All tobacco sold at auction—more than 2.2 billion pounds, accounting for about 95 percent of the total U.S. production—was graded at the 175 auction markets. In addition, we graded more than 8.6 million pounds of cigar tobacco and 412.4 million pounds of redried tobacco.

We increased the efficiency of our grading services. USDA meat graders, for example, increased average production per man by about 40 percent during the past 2 years, cutting the cost of the grading service from 6.7 cents per hundred pounds to 5.3 cents.

### Standards

Since the effectiveness of grading programs depends largely on the standards applied, we are continually seeking to improve existing grade standards for farm and food products, and issue new ones as they are needed.

A major innovation in beef grading was introduced during the year: Yield grades for beef carcasses. These provide a means of identifying differences in the amount of salable meat that carcasses will yield, and offer an additional tool for increasing efficiency in marketing beef.

The beef quality grades were also revised to reflect the latest research on the effects of marbling and maturity on taste and palatability.

Revised wool standards specify average fiber diameter limits for each grade, in terms of microns. The new grades provide for

grading wool either by comparing lot samples with official samples or by actually measuring fiber diameters. The uniformity of the fibers is also a grade factor now.

A new requirement was established for egg products packed under USDA's voluntary inspection programs. Such products must now be pasteurized to insure freedom from harmful microorganisms.

We updated existing standards for a number of important fruit and vegetable items including: Fresh lemons and apples, canned and frozen orange juice, canned tomatoes, tomato paste, and frozen spinach. New standards were issued for Brazil nuts and Southern peas and okra for processing.

### Helping Low-Income Families

Consumers who practice personal economics get more for their money. Watching newspaper ads, planning meals around the items featured in food markets, especially meats and vegetables, stretches the purchasing power of the family food dollar.

> The case for comparative shopping has been documented by a study in a city in the Southeast. A consumer could buy whole fryers at the rather low price of 29 cents a pound or less on all but 3 of the Tuesdays and Fridays in a 12-month period, in at least 1 of 20 stores where prices were checked. On over half of the Fridays, fryers were available at 29 cents a pound or less in one-fourth to a half of the stores. Without leaving their neighborhoods most consumers could have bought fryers at the "special" price on weekend shopping days.

Many consumers could profit by education in this area.

Last year Extension agents spent more than 700,000 man-days in educational programs designed to help families achieve better living. This effort was about evenly divided among rural, rural nonfarm, and urban residents.

Home economists worked with 1,114,000 members of nearly 57,000 Extension homemaker clubs throughout the Nation, and about the same number of individuals in other groups. We trained and supplied information to more than 460,000 adult volunteer home economics leaders who in turn carried their knowledge to their own communities. Making clothing; selecting and preparing food; how to buy, make, and care for home furnishings; nutrition; and planning and management in the home were emphasized.

Although the club or group method is still an effective channel for informal teaching, we supplement it by special interest meetings, seminars, short courses, radio broadcasts, TV presentations, news releases, letters to special mailing lists, and the selection and training of subprofessional workers.

State and county Extension home economists held many training meetings for professionals to up-date them in nutrition, home management, and child care. These included staff members of welfare departments, health departments, Visiting Homemaker Services, the Salvation Army, and city missions that work with disadvantaged families.

To improve our service to hard-to-reach families we expanded our training program for professional and subprofessional paid workers and volunteers. Pilot projects were set up to explore teaching methods, materials, and approaches to reach the disadvantaged who do not seek information.

These pioneering efforts are having impact.

A county Extension home economist, at the request of the Erie County, Pa., Public Housing Authority, taught housecleaning skills to 9 women employed by the Housing Authority as "Housekeeping Aides." These women in turn taught 1,500 families techniques which raise families' standards of sanitation and cleanliness and keep housing projects in better condition.

Extension agents in Missouri showed 18 program assistants how to teach clothing construction to other tenants of housing projects. Approval has been granted for training 144 additional program assistants in the State.

To reach families unable to attend consumer education classes (especially young married women employed outside the home and those housebound with small children), a New Jersey Extension home economist developed a free six-lesson "Young Homemakers' Correspondence Course." The response has been enthusiastic. The enrollment quotas, limited to 100 women, are always filled and there is an overflow waiting list. Other New Jersey counties have established similar courses.

Our home economists teach welfare recipients how to make optimum use of donated foods and Food Stamps, working with them at distribution centers, housing projects, in their homes, and in county Extension offices.

In Nueces County, Tex., the home economist started a program to teach 3,000 Spanish-speaking families how to use donated foods to the best advantage in wholesome, nutritious meals.

During the past 2 years, 85 volunteers trained by home economists have directly taught nutrition to 7,000 people of various ethnic groups. Educational materials were rewritten in Spanish and distributed to back up instruction given in home visits, office conferences, workshops, and exhibits. Another 125,000 persons were reached through radio, television, and newspapers.

In Walker County, Ala., families previously receiving donated food commodities became eligible for food stamps but many of them did not understand how to use the stamps to meet their basic food needs. In October 1964, only about half of the 2,140 families involved actually bought their quota of stamps.

Our home economists set up exhibits on the basic four food groups in the Food Stamp Office and spent 3 days talking with food stamp applicants.

Each month they sent 1,600 stamp recipients one of a series of six brief and simple letters, giving important information on nutrition, meal planning, and food buying. A poster related to each monthly letter was displayed in the Food Stamp Office. In addition, moderate and low-cost recipes were distributed at the seven Food Stamp Offices.

The County Food Stamp Director reported that many of the recipients look forward to getting the information and ask for the recipes each month. "The food information program," he said, "is well worth the time and effort."

### Young People Are Important Consumers

An expanded 4–H program is teaching America's growing teenage population more about food buying, nutrition, money management, clothing, and home furnishings.

The worst fed person in America is the teenage girl but many boys are malnourished, too. We brought the long-range national implications of teenage undernourishment, malnutrition, and obesity to the attention of parents and youth alike through a vigorous consumer information effort utilizing magazines, newspapers, house organs, a national Sunday supplement, network television, and radio.

Countrywide, 790,000 4–H'ers are trained annually through foods and nutrition projects to prepare nutritious meals and select well-balanced diets.

Various 4–H clothing projects trained 748,000 girls to make some of their own clothes and to learn more about the care and quality of their garments. Clothing know-how is increasingly included in 4–H programs for boys as well as girls. Money management and home improvement educational projects each enroll 347,000 4–H members annually.

## NEW AND IMPROVED PRODUCTS

Research is continually improving the quality, attractiveness, and convenience of our foods and other farm-based products.

New varieties of strawberries, raspberries, blueberries, limes, and tangelos appearing during 1965 combine desirable fruit characteristics with disease resistance.

Our scientists devised a new pattern for truckers to load bags of new potatoes; it increases air circulation and reduces damage during shipment.

Our marketing researchers designed a modern food center for Pittsburgh and a produce market for Milwaukee, at the request of those cities.

For retailers, we published guides on how to handle dairy products efficiently and how to operate bakery departments.

Additional convenience foods will soon be available. During 1965 we announced processes for producing low-calorie peanuts, instant applesauce, improved dehydrated celery, instant berry powders, and prefried canned bacon. In addition, our research contributed a more economical process for manufacturing nonfat dry milk and a way to produce better-flavored cheese.

### Convenience in Clothing

The textile industry quickly adopts new USDA-developed processes for treating natural fibers to enhance ease of care and

appearance in apparel. Wool that can be machine-washed without shrinking, wool with permanent creases and pleats, and cotton that is stretchable, wrinkle-resistant, or water-repellent have all received overwhelming votes of confidence from busy homemakers.

Consumers have eagerly taken advantage of the comfort and attractive appearance of all-cotton stretch fabrics. Last year, the second year of commercial production, an estimated 57 million yards of stretch cottons were manufactured by our "slack mercerization" process. Research has now opened the way for applying this process to inexpensive cotton laces, which are comfortable as well as rich and heavy in appearance.

More than a million bales of cotton now go into cotton wash-wear each year. Wash-wear cotton fabrics that wear longer, dye more evenly, and fade less than those now on the market will soon be available. An inexpensive treatment to improve resistance to weather and rot has also been developed for treating cotton fabrics used in awnings, tents, and other outdoor products.

Three textile mills are making shrink-proof wool yarn by the WURLAN process originated by USDA. Knitted and woven garments made with the yarn have the look and feel of natural wool plus the easy-care qualities of fabrics made from synthetic fibers.

### More Attractive Homes

Research continues to extend opportunities for beautification of homes and their surroundings. Many of the shrubs, flowers, and grasses in our yards were developed or improved by Agricultural Research Service plant breeding and introduction. Last year our plant explorers made a 3-month trip to the Himalayas seeking additional attractive ornamentals.

Research information on the use of light and chemicals to control plant growth and flowering was applied by florists. As a result, florists, for the first time, had flowering azaleas in their shops at Christmas time. Scientists have also found how to extend the display life of cut flowers by storing them in an atmosphere of pure nitrogen.

Consumers received information on how to protect shade trees during building construction and how to correct iron deficiency in houseplants. For the do-it-yourself fan, we issued plans for an inexpensive, plastic-covered greenhouse and for a lighted indoor planter.

### Detergents

Detergents that do not cause foaming in streams and water supplies will soon be commercially available. They are made from inedible animal fats by a USDA developed process. Unlike petroleum-based detergents, they are not toxic to the micro-organisms that break down organic matter in streams.

Among the important reasons why the American standard of living is high—and why our supermarkets abound in reasonably priced, nutritious food—is found in the highly effective disease and pest control made possible by USDA research and regulatory action.

### Disease Control

We have made highly significant progress in cooperative Federal-State efforts to wipe out brucellosis and tuberculosis, both of them costly livestock diseases that are transmissible to man. Long-time efforts culminated during 1965 in certification of Vermont as free from both bovine and swine brucellosis. Bovine brucellosis has also been eradicated in both Connecticut and Wisconsin, our leading dairy State, and New Hampshire is free of bovine tuberculosis.

Eradication of tuberculosis was speeded by a new test to identify cattle that are carriers of the disease but do not react to the standard skin test. In other disease research, we discovered that certain glands in chickens have a role in visceral lymphomatosis, a cancerlike disease of poultry. This has implications for human health.

Human as well as pet and livestock health is protected by Departmental controls over the biological products used by veterinarians and farmers to prevent and treat animal diseases. Some of these diseases, such as anthrax, rabies, and erysipelas, can be transmitted to man. In 1965, ARS supervised the manufacture of 5 billion doses of biological products. We found 90 percent to be pure, safe, and potent.

### Controlling Pests

Our scientists are concentrating much effort on methods that will effectively control pests with little or no hazard to the environment. In one experiment, oriental fruit flies were eradicated from Guam by the mass release of male flies sterilized with radioactive cobalt. We have also found that irradiation by conveying stored grain past a source of radioactive cobalt will kill insect pests.

Other research is expanding our knowledge of natural or synthetic attractants which can be used to lure insects to a trap, a chemosterilant, or other means of destruction. During the year, our entomologists isolated the sex attractant material secreted by the female pink bollworm. Scientists also extracted a substance from corn that makes it appetizing to corn earworms and identified a synthetic feeding stimulant for female houseflies. In an opposite approach, researchers found that a substance extracted from rose of sharon keeps boll weevils from feeding on cotton squares.

Development of additional crops with a built-in unattractiveness to insects came a step closer in 1965 through the identifica-

tion of wild cottons resistant to five major pests, as well as a wild sweetclover not harmed by the sweetclover weevil. Still other advances include a method of mass producing insect viruses, and research indicating possibilities in the use of sound and flashes of light to control pests.

Homeowners received additional protection when ARS extended the area in the South where the imported fire ant is being suppressed, as well as from the cooperative effort to control gypsy moths in New York, New Jersey, and Pennsylvania.

### Safe Use of Pesticides

One of our most important responsibilities to the public is assuring the effectiveness and safety of materials used in controlling pests, plant diseases, and weeds. More than 60,000 products shipped interstate are registered by ARS. We are now requiring manufacturers to supply additional data on toxicity when requesting new pesticide registrations, and we have strengthened the requirements for warning and caution statements on pesticide labels.

A nationwide educational program on proper use of pesticides, started by Extension in 1964, is also contributing to safety. All States now have committees to coordinate pesticide educational work.

We are continuing to monitor our own Department use of pesticides to assure safety in cooperative control programs. We also monitored agricultural use of pesticides at six locations. Control of boll weevils, grasshoppers, and cereal leaf beetles was accomplished with greater safety during 1965 when former methods were replaced with low-volume applications that restrict pesticide drift.

During this year, the Department made available a checklist on pesticide safety for farmers, as well as instructions on safe disposal of pesticide containers and safe aerial application of pesticides.

### Port and Border Inspection

ARS maintains a constant guard at our ports and borders against entry of foreign crop and animal diseases and pests.

Plant inspectors checked the baggage of 186 million people entering the United States during the 1965 fiscal year—8 million more than the previous year. The number of cargo and passenger carrier inspections increased 8 percent over 1964, the volume of agricultural cargoes was up 4 percent, and nonagricultural or general cargoes rose by 18 percent.

Interceptions of prohibited plant materials increased 11 percent—and 43 percent of the ships we inspected carried unauthorized materials. Of special concern is the growing number of ships' holds and cargoes infested by the khapra beetle, one of the world's most serious pests of stored grain. The number of interceptions of this beetle has grown from 131 in fiscal 1960 to 462 in 1965, and orders for fumigation of ships rose from 17 to 105.

Plant quarantine inspectors continue to find destructive pests lurking in unusual places—such as in mangoes concealed in clothing, in soil clinging to golf shoes in a passenger's baggage, and in innocent-appearing corsages and leis from Hwaii. On one occasion, khapra bettles were found in bags of international mail transported to the United States in an infested ship's hold. Larvae of the Mediterranean fruit fly—a pest that has invaded Florida three times since 1929 and was eradicated at a cost of almost $22 million—were discovered in figs a woman was carrying in her purse.

Animal inspectors guard against entry of dangerous and costly diseases by checking the health status of livestock, pets, and zoo animals presented for entry from other countries. During 1965, they allowed 1,192,000 animals to enter but rejected more than 29,000 for health reasons. Animal and animal product imports from many important producing countries are prohibited to protect this Nation from foot-and-mouth diseases, rinderpest, and other serious animal ailments that have not gained a foothold here.

## CONSERVING NATURAL RESOURCES

Conservation is a theme that runs through most of USDA's activities. We have referred to various aspects of it on many pages of this report. It is a key thread in our programs through which we protect and strengthen the Nation's family farms so that they will be able to produce abundance for today and for tomorrow. It is a foundation stone for the rural renaissance. And conservation is also a heartfelt interest of American consumers, recreationists, lovers of the outdoors.

The responsibility of USDA for conservation activities affects 3 out of 4 acres of private land in the United States. These conservation activities, even though carried out on private acres, all have a public aspect.

America as a whole has a stake in the right use of soil whether privately or publicly owned—and our conservation agencies protect it. Even in the cities our soil surveyors are increasingly called on to assess the capacity of land to sustain homes, factories, schools, airports.

America as a whole has a stake in fish, game, and other wildlife on private as well as public preserves—and our agencies safeguard it.

America as a whole has an interest in parks, playgrounds, and other recreational areas in private or public hands—and we help secure it.

America as a whole is interested in natural beauty in our cities, along rural roads, beside a creek or mighty river—and we encourage and stimulate it.

America as a whole is increasingly interested in water—in having clean water, adequate water, but not floods—and we protect that interest with utmost vigilance.

Let me be specific.

Though severe floods in many parts of the country in 1965 severely tested the flood-prevention measures installed with SCS

The new look in rural America.

A hunting preserve in a stripcropped grain field.

technical help, not a single dam designed by us failed. Damage to structures was limited to scouring of a few earth spillways and one earth fill that was overtopped.

> The week of June 14 in Colorado is illustrative. Floods and tornadic winds wove a patchwork of havoc across the eastern half of the State.
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> The Ramah dam in the Big Sandy Creek pilot watershed project, built in 1964, is credited with saving the town of Ramah and much of the downstream farmland and public facilities.
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> A false report that the dam was broken was broadcast when a passing motorist saw a 3-foot cascade of water spilling through the 600-foot-long emergency spillway. SCS Work Unit Conservationist Don Smith walked the length of the dam in the dark of night during the storm to confirm that its freeboard gave a 2-foot margin of safety above the high water crest. At 2 a.m. telephone operators broadcast word that the dam was safe and put the rumor to rest.

Specific flood-prevention measures installed in calendar year 1965 with SCS help included 335 multiple-purpose dams, 233 miles of dikes and levees, 675 floodwater-retarding structures, and 1,390 miles of stream channel improvement.

We are increasingly conscious that water is now a chief limiting factor in our economy. More than half the water flowing in our streams originates in forests, rangelands, and alpine regions. Research already has demonstrated that special patterns of timber cutting can increase water yields up to 50 percent.

We are learning how to time the release of water—to hold it back in the flood-prone spring and free it during the dry late summer. In semidesert and desert regions where most rainfall is lost by evaporation we are experimenting with silicon sprays that "waterproof" the soil. This diverts more than 50 percent of the rainfall into collectible runoff at a cost of about 20 cents per thousand gallons. These and other water yield improvement techniques can increase the amount of usable stream flow by more than 15 million acre feet a year from forest lands alone.

Research indicates that about 400 cities in the Northeast could step up water supplies sharply by managing forested watersheds primarily for water yields. The increase can be brought about by selectively removing from the watersheds some of the trees which are heavy users of water. This is now being done on Newark's Pequannock watershed and Baltimore's Liberty watershed.

Much of our activity to preserve America's natural resources involves the 154 National Forests and 19 National Grasslands which account for a big chunk of federally owned lands.

### National Forests Serve More Consumers

Their 186 million acres provide a wide variety of products and uses, including lumber for housing and other construction and countless other wood and paper products, water, grazing for livestock, hunting and fishing opportunities, and camping and

other outdoor recreation facilities for millions. Under multiple use and sustained yield management, these public lands contributed more to the consuming public in 1965 than ever before.

*Recreation.* The National Forests again drew record numbers of Americans for outdoor recreation—an estimated 150 million visitor-days use were chalked up during calendar year 1965. This was an increase of about 16 million over 1964, continuing the 11 to 12 percent annual rise that has occurred each year during the past decade.

*New Recreation Areas.* On October 19, 1965, the first purchase of land was made under the new Land and Water Conservation Fund law. A 319-acre stretch of wooded country along the historic Shenandoah River was acquired 12 miles southwest of Front Royal, Va. Plans are underway to develop the area to accommodate people seeking more outdoor recreation facilities.

The first National Forest area to be given the new designation of "National Recreation Area" was established September 29, 1965, when President Johnson signed Public Law 89–207. Thus was created the Spruce Knob-Seneca Rocks National Recreation Area within the Monongahela National Forest near Franklin, W. Va. Facilities will be developed to accommodate a million persons a year by 1970.

In December we awarded Walt Disney Productions a preliminary contract for the development of the Mineral King area in Sequoia National Forest, Calif., as an Alpine village type year-round recreation resort. This will be a high capacity ski resort near Los Angeles.

*Timber.* More timber was harvested from National Forests in fiscal 1965 than ever before, a record 11.2 billion board feet, compared with 10.9 billion in 1964.[1] The 1965 harvest represents about one-fourth of all the timber cut in the country—the equivalent of the volume needed to build 1¼ million homes.

*Tree Planting.* The number of acres of trees planted on National Forests also reached a record high—232,000 acres, in addition to natural regeneration on prepared sites. The previous record was set in 1936 under the CCC program when 223,000 acres were planted and seeded. Altogether we helped plant more than a billion trees on over 1,200,000 acres. Nearly a million acres, or 80 percent, were on private and State lands.

*Cash Receipts.* The National Forests brought in a record $147,410,834 in cash receipts during the fiscal year—an increase of $10 million over the previous year. About 90 percent of receipts were from the sale of timber; the remainder, from grazing fees and other land uses. Twenty-five percent of the receipts is returned to States for schools and roads—$35.5 million was distributed in fiscal 1965 from 1964 receipts.

*Fire Prevention.* Despite a record timber harvest and an all-time high in the number of visits to the National Forests, 9,337

[1] The figure for the 1965 calendar year was 11.7 billion board feet.

fires burned only 76,585 acres in these forests during calendar year 1965. This was an all-time low, less than half of the 183,000 acres burned in 1964, and a little more than one-third of the 5 year average of 209,000 acres. The number of man-caused fires in 1965 dropped to 4,087 compared with 5,132 in 1964, and a 5 year average of 5,268. Speedier attack with modern equipment has produced quicker and more effective fire control.

On 450 million acres of State and private lands, our Forest Service cooperates with the 49 State foresters to protect against forest fire damage. On these protected lands during 1965, Federal and State fire control organizations fought 100,568 fires that burned 1,352,769 acres. Our plans for the next 5 years call for bringing 69 million additional acres under cooperative protection.

Smokejumpers, the famous Forest Service parachuting firefighters, observed their 25th anniversary in 1965. Sixty thousand men in Forest Service parachutes, the equivalent of more than four full airborne divisions, have floated to earth during these years without a single jump fatality. We take great pride in this safety record. In the process, millions of dollars worth of timber and other natural resources have been saved by the intrepid smokejumpers.

*Snow Measurement.* A new system of snow measurement using a nuclear gauge will permit more accurate measurement of changes in the snowpack and lead to better forecasts of streamflow. Adapted and tested by Forest Service scientists in cooperation with the Atomic Energy Commission, the new gauge could replace the Mt. Rose snow sampler—a tube driven into the snow by hand—developed 56 years ago. The new system is expected to revolutionize the study of snow hydrology and snow surveys which guide management of water supplies throughout the West. It will aid in forecasting floods and estimating water supplies for homes, industry, and farmers.

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In its broadest sense conservation is not concerned with nature alone but with the total relationship of man to the world in which he lives. When we preserve the Nation's resources we protect the American people. But when we improve those resources and make them more useful we enlarge America's future.

This indeed is true of all the consumer services we have been discussing. Each of them individually and all of them collectively build and enlarge the future for our nearly 200 million people.

# EPILOG

The Great Society is a society responsive to the needs of People—as consumers, as workers, as citizens, young or old, urban or rural—People as brothers, as members of the Family of Man. The Great Society responds to the needs of People for food, housing, education, health services, recreation, beauty, culture, growth.

The Great Society marks the end of wars of attrition between haves and have-nots which have raged from the dawn of time—

> the end of an era in which one child could eat more only if another ate less, and learn more only if another learned less—
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> the end of an era in which one man could work only by under-bidding another for a job, live decently only if another occupied a shack, walk with dignity only by acquiring another's color.

The Great Society marks a new era of abundance; abundance in opportunity and abundance in the essentials of good living.

We have not yet reached it. But the paths to the Great Society are being widened and smoothed for easier and faster access. And some of those paths were eased with accelerating speed through the services offered People by the USDA in 1965.

And this is why I have called it: Year of Progress—Year of Promise.